

THE ARCHITECTURAL JOURNAL

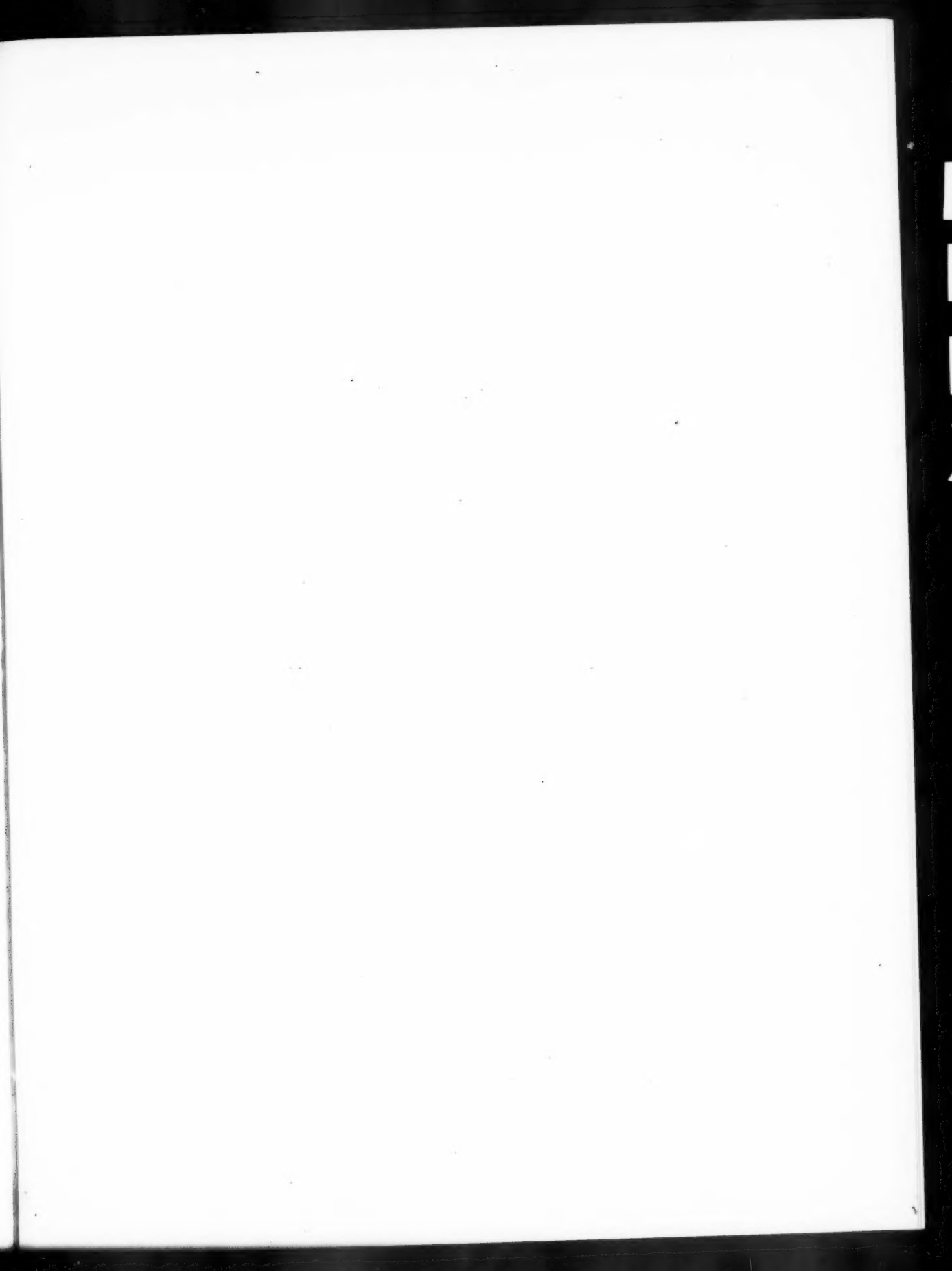
BEING THE JOURNAL OF

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

VOL. XI. THIRD SERIES, 1904

* * *

The Royal Institute of British Architects, as a Corporate Body, is not responsible for statements made or opinions expressed in the signed contributions to this volume. For those to which no name is attached the Secretary of the Royal Institute, who is the Editor of the JOURNAL, is responsible.





A. Choisy

AUGUSTE CHOISY,
Inspecteur-Général honoraire des Ponts et Chaussées, Paris.
ROYAL GOLD MEDALLIST 1904.

JOURNAL

OF

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

NOVEMBER 1903—OCTOBER 1904



VOLUME XI. THIRD SERIES

LONDON

No. 9, CONDUIT STREET, HANOVER SQUARE, W.

1904

YHA 8811 01809
J018 108720

INDEX TO VOLUME XI. THIRD SERIES.

A

Aberdeen Society. *See* ALLIED SOCIETIES.

Adams, Maurice B.: Liverpool Cathedral Competition, 76, 80; Lead Architecture, 155; The Fellowship Question, 243.

Addresses.—President's Opening Address, 1; Address to Students, 165; Address at the Presentation of the Royal Gold Medal, 449; Addresses of Presidents of Allied Societies. *See* ALLIED SOCIETIES.

Advertisement Abuse, 361.

Aitchison, Professor: COLOURED GLASS, 53; M. Choisy and his Archaeological Researches, 452.

Aitken, G. S.: BOTHWELL CASTLE, 413. ALLIED SOCIETIES.—

ABERDEEN: Annual Meeting, 380.

BRISTOL: President's "At Home,"

88; Professor Beresford Pite on Registration, 221.

CARDIFF: Professor Beresford Pite on Registration, 447.

DEVON AND EXETER: Mr. A. S. Parker's Address as Retiring President, 399.

GLASGOW: Dinner to Mr. Honeyman, 322; Address by Mr. Bromhead, 351; Educational Facilities, 537.

IRELAND: Election of Officers, 88; Mr. Ashlin's Presidential Address, 138; Annual Report, 139.

LEEDS AND YORKSHIRE: Mr. Butler Wilson's Presidential Address, 83; Mr. J. Alfred Gotch on "The Homes of Queen Elizabeth," 179; Professor Beresford Pite on Registration, 221; Mr. Seth Smith on Registration, 234; Sketching Excursions, 276; Mr. Butler Wilson's Address as Retiring President, 323; Presidential Badge, 352; Architectural Education, 506.

LEICESTER: The late R. J. Goodacre, 488.

LIVERPOOL: Mr. Hastwell Grayson on Smoky Chimneys, 271; Mr. Gilbert Scott on Liverpool Cathedral, 275.

MANCHESTER: Mr. A. E. Corbett on Modern Domestic Architecture, 117; Professor Pite on Registration, 221; Annual Meeting, 380.

NORTHERN: Presidential Address [J. Walton Taylor], 133; Registration of Architects, 134; The Year's Progress, *ib.*; Reconstruction of Northern Towns, *ib.*; Development of the Suburbs, 136; The Housing Problem, *ib.*; Industrial Buildings, 137; Removal into the Suburbs, *ib.*; What is the Solution? *ib.*; Public Officials undertaking Private Work,

ib.; Old Plans of Newcastle Improvements (*folding plates*); Annual Report, 324.

SHEFFIELD: Mr. Hugh Stannus on Architectural Education, 47; Mr. W. Gilbert on "Evolution of the Manufacturer in Art," 249; Exhibition of Drawings, 211.

Alma-Tadema, Sir L.: The French Excavations at Delphi, 42; M. Choisy's Archaeological Researches, 454; Remarks at the Unveiling of the Penrose Memorial, 456.

Amendment of the London Building Acts: R.L.B.A. Recommendations, 181, 361.

American Architecture, 534.

Amiens Sculptures, 338.

Ancient Lights: Bill before Parliament, 211; *Colls v. Home and Colonial Stores*, 368, 374, 459.

Anderson, A. Whitford: St. Alban's (review), 66.

Anderson, J. Macvicar: Registration of Architects, 129.

Annual Report of Council. *See* REPORT. Architects' Benevolent Society: Annual Report, 274.

Architects' Charges, 364.

Architects' Drawings at the President's "At Home," 158, 457, 461.

Architects out of Office Hours: Review of Drawings at the President's "At Home" [Walter Millard], 461.

Architects, Registration of. *See* REGISTRATION.

Architects' Work, Pleasures of. *See* STUDENTS, ADDRESS TO.

Architecture, Ancient Scottish. *See* BOTHWELL CASTLE.

Architecture, English, of the Fifteenth Century. *See* ENGLISH.

Architecture, Modern Domestic. *See* DOMESTIC.

Architecture, Street, Control of, 557.

Architectural Association, The: Mr. Aston Webb's Remarks on, 3, 12; Camera and Cycling Club Photographic Competition, 318; The New Premises in Tufton Street, 397; Evening Continuation School [T. Frank Green], 528; Mr. Guy Dawber's Address, 557.

Architectural Education, Board of: Mr. Aston Webb's Remarks on, 6; Constitution of, 395; Members appointed, 455, 482.

— *See* EDUCATION.

Architectural Glossary, 379.

Architectural Museum, Royal, 557.

Armoured Concrete Column, Test of an [W. Dunn], 48, 114.

Armstrong, Dr.: Biological Disposal of Sewage, 204.

Art, Civic and Social, Exhibition, 312.

Art Standing Committee: Annual Report, 359; Recommendations *re*

London Building Act Amendment 360; Election of, Polling, 443 Council Appointments, 483.

Asiatic Greek Art. *See* DELPHI.

Ashlin, G. C.: Architects' Registration, 128; Address to the Institute of Ireland, 138.

Athens, French School at: M. Holleaux' Appointment, 248.

— *See* DELPHI.

"At Homes," The President's, 158, 457, 461.

Auditors' Report, 367.

Ammonier, W.: Plaster Decoration, 270.

AUSTRALIA (WESTERN): THE CITY OF PERTH [R. M. Hamilton]: Architecture, Drainage, Lighting, &c., 15.

B

BAByLON Building Laws [R. Langton Cole], 177.

Baggallay, Frank: Architecture of Greece and Rome (review), 25.

Barrett, Percy William: obituary notice, 481.

Batchelor, F.: St. Patrick's, Dublin (review), 321.

Beale, Sydney B.: Building Superintendence (review), 131.

Beaumont, J. W.: Architects' Registration, 128; The late W. A. Royle, 445.

Beddingfield, Waller K.: The late Robert Johnson Goodacre, 488.

Belfast Hospital. *See* ROYAL VICTORIA HOSPITAL.

Bequest by Mr. Saxon Snell, 174.

Bibby, George H.: Plenum Ventilation, 441, 487, 529, 556.

BIOLOGICAL DISPOSAL OF SEWAGE FROM ISOLATED BUILDINGS [Professor Frank Clowes], 193.

Biological Treatment of Sewage: W. J. Dibdin on, 249.

Birch, George Henry: obituary notice, 396, 455.

Blashill, Thomas: The Fellowship Question, 241.

Blomfield, Reginald: Architectural Education, 14; Appointment as Hon. Secretary of Board of Architectural Education, 455.

Bodley, Mr. G. F.: Action *re* Liverpool Cathedral Competition discussed, 75.

Bond, F. Bligh: Country Houses (review), 27; SCREENS AND SCREENWORK IN THE ENGLISH CHURCH UP TO THE REFORMATION, 537.

Boni, Comm.: Exploration of Roman Forum, 484.

Bonner, H. T.: Annual Report, 370.

BOTHWELL CASTLE [G. S. Aitken].—Old Ruins, 413 Situation of Bothwell Castle, 414 The Remains, *ib.*; Old

- Plan discovered, *ib.*; Description of the Building, 415; The Great Western Tower, 416; The principal Chamber, 417; Masons' Marks and their purpose, *ib.*; Roof and Floors, 418; The South-east Tower, 419; The Chapel, 420; Banqueting Hall, 421; Drawbridge, 423; Barbican, *ib.*; The original Owners, *ib.*; Garrisoned by English under Edward I., 424; Various Vicissitudes, *ib.*; The Change in Scottish Domestic Architecture in Seventeenth Century, 425; The new South Wing, *ib.*; Later Owners, Changes, and Extensions, 426.
- Brewer, H. W.: obituary notice, 24; Vote of Condolence, 28.
- Brickwork and Masonry, 322.
- Bristol Society. *See* ALLIED SOCIETIES.
- British Association, The: Dr. Wm. Smart on Municipal House-owning, 508; Dr. Evans on Early Cretan Civilisation, 510; Exploration in Crete, *ib.*
- British Museum Extension: The Government's Application to the Council to nominate Architects, 355; Mode of Selection, 370; The Correspondence, 527; Mr. J. J. Burnett selected, *ib.*
- British School at Rome: Annual Report, 45.
- Brodie, C. H.: The Fellowship Question, 243; The late John Gibson and the Piccadilly Branch of the National Provincial Bank of England, 342.
- Bromhead, H. K.: Liverpool Cathedral Competition, 79; Registration, 178; Suggestions *re* Conduct of Competitions, 245; Remarks at Dinner to Mr. Honeyman at Glasgow, 323; Address to the Glasgow Institute, 351.
- Brooker, James William: obituary notice, 459.
- Brooks, J. M.: obituary notice, 24.
- Brown, Norman Michael: Decease announced, 396.
- Building Acts Amendment Bill: R.I.B.A. Recommendations, 181, 360, 363.
- Building By-laws: Reform of, 114, 557; Suburban, 360; London, 362, 364.
- Building Conditions, London County Council, 247.
- Building Construction Text-book, 132.
- Building Materials. *See* DOMESTIC ARCHITECTURE and CONCRETE.
- Building Superintendence, 131.
- Bulmer, G. Bertram: Registration of Architects, 250.
- Burnet, John J.: Suggestions *re* Conduct of Competitions, 245; appointed Architect for British Museum Extension, 527.
- Byers, Professor: Plenum Ventilation, 94.
- By-laws (Institute), Alterations in, agreed to, 445; Confirmation of, 464.
- By-laws: Reform of, 114, 557; *re* Deposit of Drainage Plans, 248; Suburban, 360; City of London, *re* Demolition of Buildings, 363; London County Council, 364.
- C**
- Cardiff, South Wales, and Monmouthshire Society. *See* ALLIED SOCIETIES.
- Caroë, W. D.: President's Address to Students, 173.
- Caws, Frank: Scaffolding (review), 378.
- CENTRAL STATIONS: NOTES ON THE DESIGN AND CONSTRUCTION OF BUILDINGS CONNECTED WITH THE GENERATION AND SUPPLY OF ELECTRICITY (C. Stanley Peach), 279. — Various Classes of Stations, 281; *Water-power Stations*: Niagara, 282; Sault Sainte-Marie, Michigan, 283; Apple River, Wisconsin, *ib.*; Tivoli, on the Tiber, *ib.*; Geneva, 286; Chèvres, Geneva, *ib.*; the Rheinfelden, Germany, *ib.* — *Steam-power Stations*: Deptford, 287; Manhattan Railway Company's Station, New York, 288; Waterside Station of the New York Edison Company, 290; Steel Stacks, 290; Kingsbridge Station, New York, 291; Station at Luisenstrasse, Berlin, *ib.*; Bristol Station, 292; Some Continental Stations, 292; The Ober-Spree and Moabit Stations, 294; Station at Copenhagen, 294; Stations at Munich, Turin, Vicenza, Quedlinburg, Freiberg, Genoa, 295; Station at Lot's Road, Chelsea, 296; at Park Royal, near Acton, *ib.*; at Grove Road, St. John's Wood, 297; at McDonald Road, Keith Walk, Edinburgh, 298; at Port Dundas, Glasgow, 299; at Stuart Street, Manchester, *ib.*; at Sunderland, 300; Brighton Station at Shoreham Harbour, *ib.*; Eastbourne Station at Roselands Seaside, 301; Liverpool Station at Lister Drive, *ib.*; Dublin Station at Pigeon House Fort, 302; Ringsend Station, Dublin, 303; Chiswick Station, *ib.*; City of London Station, Blackfriars, 304. — *Direct Supply Stations*: Simple and Composite, 304, 305; *Substations*, 306; Chimney Shafts, Architectural Treatment of, 308; Matters of importance in designing Central Stations, 311; List of Plans, 318; *see also* LIST of ILLUSTRATIONS.
- Discussion: Professor Kennedy, 313; Col. Eustace Balfour, 314; John Slater, 315; Mr. Ferranti, *ib.*; A. Wright, 316; Albert Gay, 316; Aston Webb, 316; The Author, 317.
- Champneys, Basil: College Planning, 390; Appointment as Vice-Chairman of Board of Architectural Education, 455.
- Chapman, H. A.: Registration of Architects, 250.
- Charges, Institute Scale of, 364.
- Chartres Sculptures, The, 337.
- Chatterton, F.: Plumbing (review) 163.
- Childs, Dr. Christopher: Plenum Ventilation, 111.
- CHIMNEYS, SMOKE (Hastwell Grayson), 271.
- Chisholm, R. F.: The Size of Bricks, 370.
- Choisy, Auguste: review of his Art of Building among the Egyptians, 161; M. de Darstein's biographical notice of, 212; Election as Royal Gold Medallist, 240; Speech at the Presentation, 451; Speech at the Unveiling of the Penrose Memorial, 455; Acknowledgments to the Institute, 483; NOTE SUR DEUX EPREUVES EGYPTIENNES CONSERVÉES À EDFOU, 503.
- Christ's Hospital, Horsham: Biological Disposal of Sewage at, 208.
- CHRONICLE.—Exhibition of the "Dessins Tournaire," 21; The Opening Meeting, 21; Strand Improvement Scheme, 21; October Statutory Examinations, 25; Vandalism at Norwich, 23; The late H. W. Brewer and the late Dr. Corfield, 24; The late J. M. Brooks, 24; M. Homolle's Paper, 43; M. Tournaire's Drawings [R. Phené Spiers], 43; Proposed Registration of Plumbers, 44; British School at Rome, 45; Holborn-Strand Improvement, 46; The late T. J. Willson [S. J. Nicholl], 46; November Examinations: Results, 69; Intermediate Examination and the Victoria University, 73; Liverpool Cathedral Competition: Action of the Assessors discussed, 73; Fraserburgh Competition, 81; M. Homolle at Cambridge, 81; Smoke Abatement, 81; Test of an Armoured Concrete Column, 114; Building By-laws Reform, 114; Dr. Evans's Explorations at Knossos, 114; Sir James Knowles, 115; Royal Academy £200 Studentship, 115; Reinstatement of Member, 115; The late Charles Fowler [H. Lovegrove], 115; The late N. Y. A. Wales [F. de J. Cleve], *ib.*; Southwark Bridge, 126; Architects' Registration, 126, 246, 374; Plumbers' Registration, 130; The late William Pain, 130; Memorial to Mr. Penrose at Athens, 130; Stained Glass at the Abbey, 131; President "At Home," 18 Jan., 158; Prizes and Studentships Award, 158; The late Henry Saxon Snell, 160; National Registration of Plumbers, 160; Prizes and Studentships: Annual Exhibition of Drawings, 173; Annual Addresses to Students, 173; Mr. Saxon Snell's Bequest to the Institute, 174; The New Director of National Museums, France, 174; The Société Centrale des Architectes Français, 174; Election of the Royal Gold Medallist, 240; The Fellowship Ques-

tion: Discussion, 241; Amended "Suggestions for the Conduct of Architectural Competitions," 243; Prizes and Studentships 1904-05, 246; The late Percival Gordon Smith, 247; L.C.C. Building Conditions, 247; Sixth International Congress of Architects, Madrid, 248; The French School at Athens, 248; The late Dr. A. S. Murray, 274; The Architects' Benevolent Society, 274; Liverpool Cathedral, 275; Special Elections to Fellowship, 318; Photographic Competition, 318; House of Commons Committee on Ventilation, 319; The late John Gibson, 319; The Coal Smoke Abatement Society, 320; An Architect's Memorial, 320; Registration and the Council, 342; War Office Barracks Construction Department, 342; The late John Gibson, 342; Exhibition of Civic and Social Art, 342; International Congress of Architects, Madrid: Secretary R.I.B.A.'s Report, 343; Outside Nominations to Council, 374; Special Election to Fellowship, 374; Seventh International Congress 1906, 375; *Home and Colonial Stores v. Colls*, 375; Board of Architectural Education, 395, 455, 482; Board of Professional Defence, 395; The Registration Question, 395; Obituary, 396, 445, 459, 484, 557; The Architectural Association, 397; The Annual Elections, 443; Indian Queen Victoria Memorial, 444; Secretary R.I.B.A. and the Spanish Architects, 445; International Congress of Hygiene at Brussels, 445; The late Mr. Birch, 445; Unveiling of the Penrose Memorial at St. Paul's, 455; The President's Fourth "At Home," 457; *Colls v. Home and Colonial Stores*, 459; The Birthday Honours, 459; Whitgift Hospital, 459; June Examinations: Results, 477; R.I.B.A. proposed Visit to Newcastle-on-Tyne, 482, 506; Seventh International Congress of Architects, 483, 528; Council Appointments to Standing Committees, 483; Miller Arcade, Preston, 483; M. Choisy's Acknowledgments, 483; Album of Past Presidents' Portraits, 483; The New Curator of the Soane Museum, 484; Exploration of the Roman Forum, 484; Leeds and Yorkshire Society: Architectural Education, 507; Edinburgh School of Art, 506; St. Bartholomew the Great, 507; Royal Victorian Institute, 507; The late Frank Manoh Kent, 507; British Museum Extension, 527; Postponement of the Annual Dinner, 528; Sessional Papers 1904-05, 528; The A.A. Schools, 528; Plenum Ventilation and the Royal Victoria Hospital, Belfast, 529, 556; The Formation of Suburbs, 529; School of

Art Wood-carving, 557; The Architectural Association: Mr. Guy Dawber's Address, 557
Churches, English, Screens and Screenwork in. *See* SCREENS.
City Halls, The Ancient, 163.
Clapham, F. Dare: Brickwork and Masonry (review), 322.
Clarke, Max: Biological Disposal of Sewage, 204; L.C.C. By-laws relating to the Deposit of Plans of Drainage Work, 209; Plenum Ventilation, 440.
Clere, F. de J.: The late N. Y. A. Wales, 115.
Clowes, Professor Frank: BIOLOGICAL DISPOSAL OF SEWAGE FROM ISOLATED BUILDINGS, 194, 206, 207.
Cnidus, Treasury of. *See* DELPHI.
Coal Smoke Abatement Society, 320.
Cole, R. Langton: Building Laws of Babylon, 177; Biological Disposal of Sewage, 203; Plenum Ventilation, 439.
Collcutt, Thos. E.: Liverpool Cathedral Competition, 76.
COLLEGIATE BUILDINGS, ON THE PLANNING OF [Rev. J. B. Lock].—Colleges of Fourteenth and Fifteenth Centuries, 381; Enclosed Courts, *ib.*; Lowness essential to Beauty of Buildings and Health of Occupants, 382; Dr. Caius' Restrictions to secure Sunlight and Air, *ib.*; Arrangement of the Buildings, 381; The Halls at Giron and Caius, 383; Arrangement of Rooms for the various Occupants, *ib.*; Accommodation in the ancient Buildings, *ib.*; Some Points to be borne in mind, 384; An Important Requirement as regards Aspect, *ib.*; Ventilation, *ib.*; Objections to Four Sets of Rooms on a Floor, 385; The best Typical Arrangement, *ib.*; One of the best Plans adopted, 386; Objections to the Arrangement adopted in the new Buildings at Tree Court, Gonville and Caius, *ib.*; Irregularity of Plan desirable, 387; St. Michael's Court, Gonville and Caius, *ib.*; Difficulty of a Corner solved, 388; Two Plans compared, 388; Suggested Improvement of an existing Plan, 388, 389; Points emphasised by the Author, 388; Mistakes in College Planning, 390.
Discussion: Basil Champneys, 390; E. S. Prior, 392; W. J. Locke, *ib.*; The Author, 393; A. W. S. Cross, 393; H. G. Ibberson, 394; Aston Webb, *ib.*
Colls v. Home and Colonial Stores v.: House of Lords Decision, 368, 374; Council's Letter of Congratulation to Mr. Colls and the Reply, 459.
Coloured Glass. *See* GLASS.
Competitions: Fraserburgh Infectious Diseases Hospital, 81; Amendment of the Institute Suggestions for the Conduct of, 243, 252.
Concrete (Armoured) Test, 48, 114.

Congress of Architects, International: Particulars of Arrangements for the Madrid Congress 1904, 248; Report of Secretary R.I.B.A., 343; The Secretary R.I.B.A. and the Spanish Architects, 445.
— Decision to hold the next Congress in London in 1906, 375; Appointment of the Permanent Committee, 483; Royal Patronage, 483, 528.
Congress of Hygiene at Brussels, 445.
Control of Public Improvements, 8, 12.
Corbett, Alfred E.: MODERN DOMESTIC ARCHITECTURE, 117.
Corfield, W. H.: obituary notice, 24.
COUNCIL, THE: Deed of Award of Prizes and Studentships, 158; Action re L.C.C. By-laws relating to the Deposit of Plans of Drainage Work, 209; ANNUAL REPORT, 353; Outside Nominations to, 374; Annual Elections, votes polled, 443; Correspondence with the Office of Works re Appointment of an Architect for British Museum Extension, 527.
Country Houses (review), 27.
Cross, A. W. S.: Liverpool Cathedral Competition, 75, 79; Suggestions re Conduct of Competitions, 245; College Planning, 393.
Crete, Early Civilisation in, 510; Exploration in, 511.
Crace, J. D.: PLASTER DECORATION, 253, 270, 460.
Crompton, W. E. V.: Architectural Glossary (review) 379.
Cubitt & Co.'s Specification of Portland Cement, 50; Test of an Armoured Concrete Column, 114.

D

D'AVILA, L. C. PEDRO: obituary notice, 459.
Decoration, Plaster. *See* PLASTER DECORATION.
DELPHI: THE TREASURY OF CNIDUS AND THE MONUMENTS OF IONIAN ART AT [J. T. Homolle].—The Treasury restored (*frontispiece*); The late Mr. Penrose, 29; The French Excavations at Delphi, 30; M. Tournaire's Drawings, *ib.*; Extent, Cost, &c., of the Excavations, *ib.*; Plan, 31; Tour of Ruins and Description of Monuments unearthed, 32; Restoration where possible, *ib.*; Remains of Treasury of Cnidus, 33; Its Restoration described, *ib.*; Lavish Sculpture Decoration, 35; Pediment, Frieze, and Caryatides, *ib.*; Subjects of Bas-reliefs: Style and Technique, 36; The Appellation "Treasury of Cnidus" justified, *ib.*; The Monument "Ionian" pure and simple, 37; Characteristics of Ionian Art, *ib.*; Comparison with other typical and contemporary Ionian Monuments, 38; Treasuries of

Phocias and Clazomenes, *ib.*; A Capital of Egyptian Type, 39; The Treasury of Cnidos a Model for neighbouring Peoples, 40; Historic Significance of the Monuments, *ib.*; Western Greek Civilisation derived from Asiatic Greece, *ib.*

Discussion: Dr. Murray, 41; G. A. Macmillan, *ib.*; Dr. Evans, *ib.*; J. L. Myres, 42; Sir L. Alma-Tadema, 42; John Slater, 42.

Devon and Exeter Society. *See* ALLIED SOCIETIES.

Dibdin, W. J.: Treatment of Sewage by Bacteria, 249.

Dickie, Archibald C.: Phylakopi (review), 529.

Domes and Framed Spires. *See* STRESSES.

DOMESTIC ARCHITECTURE, MODERN [Alfred E. Corbett].—The Craftsman's View of Architecture, 117; Cavity and other Walls, 118; Wall-coverings, *ib.*; Roofing Materials, 119; Concrete Floors, 120; Staircases, 121; Chimneys, *ib.*; Electric Lighting, *ib.*; Aspect, 122; Prospect, *ib.*; Plan, 124; Elevation and Materials, 125.

Drainage Work, L.C.C. By-laws respecting Deposit of Plans, 209.

Drawings submitted for Prizes and Studentships, Criticism of [James S. Gibson], 169.

Dressler, Conrad: The Wells Statues, 341.

Dunn, W.: TEST OF AN ARMOUR'D CONCRETE COLUMN, 48, 114; NOTES ON THE STRESSES IN FRAMED SPIRES AND DOMES, 401.

E

EARTH Structure, Evolution of, 348.

Ebbetts, D. J.: Biological Disposal of Sewage, 208.

Edfou, Epures Egyptiennes à, 503.

Edinburgh, Architectural Education at, 507.

EDUCATION AND EXAMINATION, ARCHITECTURAL: SOME REFLECTIONS ON, SUGGESTED BY THE PERUSAL OF THE REPORTS OF THE MOSELEY EDUCATION COMMISSION [W. Howard Seth-Smith], 371.

Education, Architectural, 3; Committee appointed, 6; Mr. Reginald Blomfield's Views, 14; References to, in the Annual Report, 356; at Leeds, 506; at Edinburgh, 507; A.A. Evening Continuation School, 528; at Glasgow, 537.

— Board of: Constitution of, 395; Members of Board appointed, 455, 482.

Education and Registration of Architects: Professor Beresford Pite on, at Cardiff, 447.

Egyptian Architecture, 161; DEUX EPURES EGYPTIENNES CONSERVEES À EDFOU [A. Choisy], 503.

Electricity Generating Stations. *See* CENTRAL STATIONS.

Emerson, Sir Wm.: Indian Queen Victoria Memorial, 444.

Engineering Work at Royal Victoria Hospital, Belfast, 102.

ENGLISH ARCHITECTURE OF THE FIFTEENTH CENTURY [W. H. Wood].—Perpendicular Work, Reasons for Study of, 489; Mouldings, Capitals, Bases, Piers, 490; Arches, Doorways, 491; Windows, 492; Paneling, Vaulting, 494; Wood Roofs, Roof Pitch, 495; Buttresses, Church Planning, 496; Clerestories, Towers, 497; Spires, Woodwork, 498; Imitations, 500.

— New Work on, 511.

English Church, Screens and Screen-work in. *See* SCREENS.

Elections, Annual: New Nominations, 374; Results and Votes polled, 443; Scrutineers, *ib.*

Essay Prize, 169.

Evans, Dr. Arthur J.: The Excavations at Delphi, 41; Explorations at Knossos, 114; Early Cretan Civilisation, 510.

EXAMINATIONS, THE (ARCHITECTURE): Preliminary, Intermediate, Final, and Special: Nov. 1903 and June 1904; Results and Lists of Passed Candidates, 69, 71, 72, 477, 480, 481; Analysis of Failures in the Final, 73, 482.

— Intermediate Examination and Victoria University, Manchester, 73.

— (STATUTORY): Results, 23.

Experiments on Armoured Concrete Column, 48, 114.

F

FELLOWS Question, The, 1; Discussion at the Institute, 240; Resolutions adopted *re* Alterations of By-laws, 252, 464.

Fellowship, Special Elections to, 318, 374.

Fifteenth-Century English Architecture. *See* ENGLISH.

Finances, 365.

Flower, Arthur S.: Stratford-upon-Avon (review), 68; Shropshire Churches (review), 162.

Fowler, Charles: obituary notice, 115.

Fowler, Dr. Gilbert: Biological Disposal of Sewage, 201, 205, 206.

Framed Spires and Domes. *See* STRESSES.

Frampton, A.: Liverpool Cathedral Competition, 80.

France, System of Control in, over Public Improvements, 9; The French School at Athens and the Excavations at Delphi, 29; M. Homolle's Appointment, 174; M. Homolle's Successor, 248.

Fraserburgh Competition, 81.

Freeman, Richard Knill: obituary notice, 484.

G

GARDNER, ARTHUR: Foreign Sculptures contemporary with the Wells Statues, 336.

Gardner, J. Starkie: LEAD ARCHITECTURE, 141, 157.

Geymüller, Baron von: Michelangelo as Architect, 485.

Gibson, James S.: REVIEW OF WORKS SUBMITTED FOR PRIZES AND STUDENTSHIPS 1904, 169.

Gibson, John, The Late: Bust of, presented to the Institute, 319; Piccadilly Branch of the National Provincial Bank of England, 342.

Gilbert, W.: Evolution of the Manufacturer in Art, 249.

Glasgow Architectural Association: Professor Beresford Pite on the Registration of Architects, 221.

GLASS, COLOURED (ROYAL ACADEMY LECTURES 1903) [Professor Aitchison, R.A.].—Origin of Glass, 53; Use of, by the Ancients, 54; Pliny's References to, 55; Martial's Epigram, *ib.*; Ancient MS. Directions for making, 56; Oriental Windows in Pierced Plaster, 57; Grisailles, *ib.*; Splendour of 12th and 13th century Windows, 58; Decline, and Causes thereof, 59; Glories of the Art revived at Florence, *ib.*; Some notable 14th-century Windows, 60; Windows at Venice and Angers, 60; Application and Treatment, 61; Modern Imitations of Old Glass, 62; Effects of Age and Decay, 62; Future Prospects of the Material, 63; Some Good Modern Examples by Sir E. Burne Jones, *ib.*; Stained Glass in Pictures, 64; The Poets and Stained Glass, *ib.*; Nathaniel Hawthorne's *Transformation*, 65.

Glover, Wm.: Presentation of Bust of the late John Gibson, 319.

Goldsmiths' Row. *See* LEAD ARCHITECTURE.

Goodacre, John: obituary notice, 445.

Goodacre, Robert Johnson: obituary notice, 488.

Gotch, J. Alfred: The Homes of Queen Elizabeth, 179.

Graham, Alex.: The late H. W. Brewer, 24; Dr. Corfield, *ib.*; Messrs. Tasker and Birch, 397.

Grayson, Hastwell: SMOKY CHIMNEYS, 271.

Greece and Rome, Architecture of (review), 24.

Greek, Classic, Art. *See* DELPHI.

Green, Arthur: obituary notice, 484.

Green, T. Frank: Architectural Association Evening Continuation School, 528.

Griffiths, Harold: Biological Disposal of Sewage, 203; Plenum Ventilation, 438.

Gwyther, William Warlow: Decease announced

H

- HALL, EDWIN T.: Liverpool Cathedral Competition, 77, 80; L.C.C. By-laws relating to the Deposit of Plans with respect to Drainage Work, 209.
- HAMILTON, R. M.: THE CITY OF PERTH, WESTERN AUSTRALIA, 15.
- HARE, HENRY T.: Remarks on the President's Address, 12; Liverpool Cathedral Competition, 75, 79; Architects' Registration, 129.
- HEATHEOTE, CHARLES: The Registration Question, 395.
- HEATING AND VENTILATION OF HOSPITALS. See PLENUM.
- HEATON, CLEMENT: Statues of Wells Front, 486.
- HEBB, JOHN: Vandalism at Norwich, 23; St. Andrea, Genoa, 487.
- HENMAN, W., and HENRY LEA: ROYAL VICTORIA HOSPITAL, BELFAST: ITS INITIATION, DESIGN, AND EQUIPMENT, 89, 112, 113, 427, 463, 508.
- HOLBORN-STRAND IMPROVEMENT: Building Sites, 46.
- HOLDER, SIR JOHN: Royal Victoria Hospital, Belfast, 110.
- HOLIDAY (A) IN PORTUGAL [W. Crum Watson], 465.
- HOMOLLE, J. T.: LE TRÉSOR DE CNIDE ET LES MONUMENTS DE L'ART IONIEN À DELPHES, 29, 43; Honours at Cambridge, 81; Appointment as Director of National Museums, France, 174.
- Home and Colonial Stores v. Colls: House of Lords Decision, 368, 374; Congratulations to Mr. Colls, 459.
- HONEYMAN, J.: Dinner to, at Glasgow, 322.
- HOOPER, FRANCIS: Evolution (review), 348.
- HOPE, W. H. ST. JOHN: The Wells Statues, 339.
- HOSPITAL DESIGN, EQUIPMENT, AND VENTILATION. See ROYAL VICTORIA HOSPITAL, BELFAST.
- HOUSE OF COMMONS COMMITTEE ON VENTILATION, 319.
- HUDSON, E. W.: Lead Architecture, 156; The Fellowship Question, 241; Plenum Ventilation, 438.
- HUTCHINSON, C. E.: Liverpool Cathedral Competition, 77, 81; Suggestions re Conduct of Competitions, 245.

I

- IBBERSON, H. G.: College Planning, 394.
- Indian Queen Victoria Memorial: Description, 444.
- Intermediate Examination: Exemption of Students of Victoria University, Manchester, 73.
- International Congress of Architects at Madrid. See CONGRESS.
- Ionian Art. See DELPHI.
- Ireland, Royal Institute of. See ALLIED SOCIETIES.

J

- JOHN, W. GOSCOMBE: President's Address to Students, 173.
- JOHNSON, C. J.: THE RUINS OF MITLA, MEXICO, 513.
- JONES, W. CAMPBELL: The Ancient City Halls (review), 163.

K

- KENT, FRANK MANOAH: obituary notice, 484, 507.
- KING, THE: Patronage of the Seventh International Congress of Architects, London, 483.
- KING, E. VINCENT: Biological Disposal of Sewage, 204.
- KITSON, S.: Registration of Architects, 251.
- KNOSSOS: DR. EVANS'S Explorations, 114.
- KNOWLES, SIR JAMES, 115.

L

- LANCHESTER, H. J.: Liverpool Cathedral Competition, 78, 80.
- LANCHESTER, H. V.: Suggestions re Conduct of Competitions, 245.
- LANGSTON, H. HARDWICKE: Liverpool Cathedral Competition, 81; The Fellowship Question, 242; Registration, 246.
- LEAD ARCHITECTURE [J. Starkie Gardner].—Antiquity of the Lead Industry in Britain, 141; Specially valuable properties of the Metal, 142; Its Decorative Use in Architecture, 143; Fourteenth-Century Work at Rheims, *ib.*; Examples of use in Medieval Times in England, 144; Windows, Fanlights, and Balusters, *ib.*; Ancient Methods of Use, *ib.*; Early Use in the Plumber's Craft, *ib.*; Among the Romans and Anglo-Saxons, 145; Fountains and Decorated Tanks, 146; Decorative Statuary in Stuart and Early Georgian times, *ib.*; Traditions of Architecture in Metal narrated by the Classic Poets and Historians, 147; Extensive Use of Lead on Gothic Buildings, 148; Palace of Sheen and Richmond Palace, 149; Hampton Court, *ib.*; Nonsuch a veritable Palace of Lead, *ib.*; Engraved Representations of Nonsuch, 150; Goldsmiths' Row sketched, *ib.*; Suggestions for Use of Lead in Modern Architecture, 152; Leaden Bridge over Northumberland Street, *ib.*; Use in Winter Gardens, &c., *ib.*; For Monumental Purposes, 154; Decorative Treatment of Water-tower, *ib.*; Present Consumption of Lead, *ib.*; Fiscal Statement, *ib.*
- Discussion: R. Phené Spiers, 155; Ernest George, *ib.*; Maurice B. Adams, *ib.*; W. H. Seth-Smith, 156; E. W. Hudson, *ib.*; Aston Webb, *ib.*; The author, 157.

- Lead Architecture: Nonsuch Palace and Stucco Duro [R. Phené Spiers], 176.
- Richmond Palace [Ralph Nevill], 177.
- LEA, HENRY, and W. HENMAN: ROYAL VICTORIA HOSPITAL, BELFAST, ITS INITIATION, DESIGN, AND EQUIPMENT, 89, 112, 113, 462, 487, 508, 529.
- Leeds and Yorkshire Society. See ALLIED SOCIETIES.
- LEGAL.—Tenants' Obligations: *Stockdale v. Ascherberg*, 212; *In re Warriuer*, 212; *Harris v. Hickman*, 212; Ancient Lights; *Colls v. Home and Colonial Stores*, 374.
- Leicester and Leicestershire Society. See ALLIED SOCIETIES.
- LETHABY, PROFESSOR W. R.: The Wells Statues, 339.
- LIBRARY, THE: Donations, 251; Librarian's Report and Statistics, 362; Donors, *ib.*; Important Additions, *ib.*; Summary of the Year's Additions, xvii.
- Light and Air: *Home and Colonial Stores v. Colls*; House of Lords Decision, 368, 374; Congratulations to Mr. Colls, 459.
- Lighting Schoolrooms, 536.
- LISHMAN, FRANK: The Fellowship Question, 243.
- Literature Committee: Annual Report, 361; Annual Elections, votes polled, 443; Council Appointments, 483.
- Liverpool Architectural Society. See ALLIED SOCIETIES.
- Liverpool Cathedral Competition: Action of Assessors discussed, 73.
- Liverpool Cathedral, 7, 275.
- Liverpool University: Professor Reilly's Appointment, 212.
- LOCK, REV. J. B.: THE PLANNING OF COLLEGIATE BUILDINGS, 381; Plenum Ventilation, 436.
- LOCKE, W. J.: Report as Institute Delegate at International Congress, Madrid, 343; Memorial to Alfonso XII., 345; College Planning, 392; The late L. C. Pedro d'Avila, 459.
- London Building Acts Amendment Bill 1904: The Institute Recommendations, 181; Art Committee's Recommendations, 361; Practice Committee's, 363.
- London County Council and the Strand Improvement, 10, 21; By-laws relating to the Deposit of Plans, &c., with respect to Drainage Work [Max Clarke and Edwin T. Hall], 209; Building Conditions, 247; By-laws re Deposit of Plans of Drainage, 248.
- London Improvements. See PRESIDENT'S ADDRESS.
- London Traffic Commission, 361.
- Lovegrove, Henry: The late Charles Fowler, 115; L.C.C. By-laws re Deposit of Plans of Drainage, 248; An Architect's Memorial, 320.
- Lovegrove, G. H.: Sir John Vanbrugh, 248.

Lucas, Geoffry: Liverpool Cathedral Competition, 79.

M

MACMILLAN, G. A.: The Excavations at Delphi, 41.

Madrid, International Congress of Architects at. *See* CONGRESS.

— Memorial to Alfonso XII., 345.

Manchester Society. *See* ALLIED SOCIETIES.

Manufacturer in Art, Evolution of the, 249.

Mathews, J. Douglass: The Fellowship Question, 243.

Mayston, A. R.: Suggestions *re* Conduct of Competitions, 246.

Members newly elected, 82, 140, 251, 318, 446; Objection raised to Candidate at moment of Election ruled invalid, 446.

Metal, Architecture in. *See* LEAD ARCHITECTURE.

Mexico, The Ruins of Mitla. *See* MITLA.

Michelangelo as Architect [Baron von Geymüller], 485.

Middleton, G. A. T.: The Fellowship Question, 241.

Millard, Walter: How to read a Building (review), 377; Architects out of Office Hours: The Drawings at the President's "At Home," 461.

Miller Arcade, Preston, Allegations against Members, 483.

MINUTES.—Nov. 1 (Ordinary), 28; Nov. 16 (Ordinary), 47; Nov. 30 (Business), 82; Dec. 14 (Ordinary), 116; Jan. 4 (Business), 140; Jan. 18 (Ordinary), 164; Feb. 1 (Ordinary), 179; Feb. 29 (Special and Business), 251; March 7 (Ordinary), 276; March 28 (Ordinary), 324; April 18 (Ordinary), 351; May 16 (Ordinary), 399; May 2 (Annual Meeting), 371; June 6 (Special, Business, and Ordinary), 445; June 16 (Special and Ordinary), 464.

MITLA, MEXICO: THE RUINS OF [C. G. Johnson].—General Plan, 513, 514; Measured Drawings, 515, 516; Description of the various Groups, 517; The East Hall and Hall of Monoliths, 518; Construction, 519; Characteristic Mosaic-work, 520; Repeat Decoration, Adjustment of, at Corners, 521; Mosaic Pattern carved on Lintel, 522; Substructures, Stairways, *ib.*; Walls, 523; Wall painting, Doorways, The Roof, 524; Tools and Standards of Measurement, *ib.*; The Mexican Codices, 525.

Modern Domestic Architecture. *See* DOMESTIC.

Monkman, T.: Registration of Architects, 251.

Moseley Education Commission. *See* EDUCATION.

Munby, Alan E.: Plenum Ventilation, 440.

Municipal House-owning, 508.

Murray, Dr. A. S.: Excavations at Delphi, 41; Death of: obituary notice, 274.

Myres, J. L.: Excavations at Delphi, 42.

N

NEVILL, RALPH: Richmond Palace, 177. Newcastle Improvements, with Plans [J. Walton Taylor], 136.

Newcastle-on-Tyne, Proposed Visit and Annual Dinner at, 482, 506; Postponement of, 528.

Nicholl, S. J.: The late T. J. Willson, 46.

Nonsuch Palace. *See* LEAD ARCHITECTURE.

Northern Association. *See* ALLIED SOCIETIES.

Norwich, Vandalism at, 23.

NOTES, QUERIES, &c.—Leadwork at Nonsuch Palace and Stucco Duro, 176; at Richmond Palace, 177; Lead Fanlights, 177; Building Laws of Babylon, 177; L.C.C. By-laws *re* Deposit of Duplicate Plans of Drainage System, 248; Sir John Vanbrugh, 248.

O

OBITUARY.—William Henry Arber, 557; L. C. Pedro d'Avila, 459; Percy William Barrett, 484; George Henry Birch, 396, 445; James William Brooker, 459; Norman Michael Brown, 396; Charles Fowler, 115; Richard Knill Freeman, 484; Percy Christian Gibbs, 371; John Goodacre, 445; Arthur Green, 484; William Warlow Gwyther, 116; Frank Manoah Kent, 484, 507; Edward Baldwin John Knox, 557; Walter Simpson McClelland, 140; Alexander Stuart Murray, 274, 276; William Pain, 130; William Alfred Boyle, 445; Ernest Simm, 484; Percival Gordon Smith, 247; Henry Saxon Snell, 160; Francis William Tasker, 396; James Lewis Thomas, 557; Silvanus Trevail, 47; Nathaniel Young Armstrong Wales, 116; Thomas John Willson, 46.

OFFICE OF WORKS: Correspondence with the Council *re* Architect for British Museum Extension, 527.

Oglesby, Robert P.: The Homes of Queen Elizabeth, 179; SIR JOHN VANBRUGH, ARCHITECT AND DRAMATIST, 213; Registration of Architects, 250.

P

PAIN, WILLIAM: obituary notice, 130. Painting and Decorating, 446.

Parker, A. S.: Address as Retiring President of the Devon and Exeter Society, 399.

Parry, Kaye: Plenum Ventilation, 437.

Patrick, George: The late Mr. Birch, 445.

Peach, C. Stanley: NOTES ON THE DESIGN AND CONSTRUCTION OF BUILDINGS CONNECTED WITH THE GENERATION

AND SUPPLY OF ELECTRICITY KNOWN AS CENTRAL STATIONS, 280, 317.

Pearson, J. L.: Exhibition of his Drawings, 158.

Penfold, E.: Biological Disposal of Sewage, 204.

Penrose, The late F. C.: M. Homolle's Tribute to, 29; Memorial to, at Athens, 130; Unveiling of Memorial to, at St. Paul's, 455.

Perth, Australia. *See* AUSTRALIA.

Photographic Competition, 318.

Phylakopi, 529.

Pick, S. Perkins: Plenum Ventilation, 431; The late John Goodacre, 445.

Pike, E. B.: Biological Disposal of Sewage at Horsham, 207.

Pite, Professor Beresford: REGISTRATION OF ARCHITECTS, 222; The Fellowship Question, 242, 246; Suggestions *re* Conduct of Competitions, 244; The Wells Statues, 339; Annual Report, 370; Speech at Cardiff on Registration and Education of Architects, 447.

Planning of Collegiate Buildings. *See* COLLEGIATE.

PLASTER DECORATION [J. D. Crace].—The Mud-built House of Barbaric Man, 254; Decorative Use of Stucco by the early Greeks, *ib.*; Stucco Decorations at the Palace of Knossos, *ib.*; Decorative Stucco-work in ancient Rome, Herculaneum, and Pompeii, 255; at the Via Latina and Villa Farnesina, *ib.*; Plaster Decoration under the Mohammedan Conquerors, 256; Mosque of Ibn Tuloon, Cairo, 257; Mosque of El Hakim, *ib.*; Palace of the Alhambra, *ib.*; Ornament designed expressly for Casting, 258; Decorative Stucco in Mediaeval Times, *ib.*; Pinturicchio's Work, *ib.*; Bramante's Work at St. Peter's, Rome, *ib.*; Giovanni da Udine's Reproduction of the Stucco of the Ancients, 259; Jacopo Tatti's Recipe, *ib.*; Pierino del Vaga's Work at the Sala Regia, Vatican, and the Doria Palace, Genoa, 260; Alessandro Vittoria, *ib.*; Santa Maria delle Grazie, Milan, 261, 460; Primaticcio, Il Rosso, Niccolo dell' Abbate, *ib.*; External Decorative Stucco-work at Nonsuch, 263; Criticism of the English Plaster-work of the Period, *ib.*; The Classic Work of Inigo Jones and Wren, 265; Elaborate Modelling of Fruit, Flowers, &c., *ib.*; Various Examples of the Wren School, 266; Kent's Work, *ib.*; Mid-eighteenth-century Work in England, *ib.*; The Brothers Adam, *ib.*; The Fibrous-plaster Method of later years, 267; Owen Jones and the Author's Father, *ib.*; The Illustrations, 268; Other Papers on the subject, *ib.*

Discussion: R. Phenè Spiers, 268; G. H. Fellowes Prynne, 269; W. Aumonier, 270; The Author, *ib.*

Plaster Decoration at Sta. Maria delle Grazie, Milan, 460-61.

PLENUM SYSTEM OF VENTILATION: its application at the Royal Victoria Hospital, Belfast, 90 *et seq.*, 427, 430; Correspondence, 462, 487, 508, 529, 556.

— — — Discussion at the Institute: S. Perkins Pick, 431; A. Saxon Snell, 438; Rev. J. B. Lock, 436; Kaye Parry, 437; Harold Griffiths, 438; E. W. Hudson, *ib.*; R. Langton Cole, *ib.*; Alan E. Munby, 440; Max Clarke, *ib.*; Aston Webb, 441; George H. Bibby, *ib.*

— — — See also ROYAL VICTORIA HOSPITAL.

Plumbers, Proposed Registration of, 44, 130, 160.

Plumbing, 163.

Portland Cement: W. Cubitt & Co.'s Specification, 50. See also CONCRETE.

PORTUGAL, A HOLIDAY IN [W. Crum Watson].—Sketch of the History of Portugal, 465; Architecture: Roman Temple at Evora, 466; Cathedral, Coimbra, *ib.*; Cistercian Abbey, Alcobaça, 467; Cathedral of Evora, 468; Churches of Thomar, Leiria, and Leça de Balio, 469; Ecclesiastical Buildings at Batalha: Work of Afonso Domingues and Matheus Fernandes, 470; The Capellas Imparfeitas, 472; The New Parish Church and the Templar Church, Thomar, *ib.*; João de Castilho's Works at Thomar, 473; Sta. Cruz, Coimbra, 474; Dom Manoel's Buildings at Evora and Belem, *ib.*; Old Palace at Cintra, 476; Santo Vicente de Fora, *ib.*

Portuguese Architecture. See PORTUGAL.

Practice Committee: Annual Report, 363; Annual Elections, Votes polled, 443; Council Appointments, 483.

PRESIDENT'S OPENING ADDRESS [Aston Webb, R.A.].—The Institute and the Profession, 1; The Fellows Question, *ib.*; Events of the previous Session, 2; The "At Homes," *ib.*; The Architectural Association, 3; The Institute Premises Question, *ib.*; The Form of Contract, *ib.*; Statutory Registration of Architects, *ib.*; Some Reasons against Registration, 4; Architectural Education, 6; Appointment of an Education Committee, *ib.*; Proposed Board of Education, 7; Truro and Liverpool Cathedrals, *ib.*; Preservation of London Squares, 8; Control over public improvements: American practice, *ib.*; The French System, 9; Competent Authoritative Control needed for London Improvements: Some Cases in point, 10; Study of the Past, 11; Ruskin on the Mission of the Architect, *ib.*

Vote of Thanks: Lord Windsor, 11; Henry T. Hare, 12; Reginald Blomfield, 13.

President's "At Homes": 11th January, Exhibition of J. L. Pearson's Drawings, 158; 18th June, 467; Mr. Walter Millard's Review of Drawings exhibited, 461.

Presidents R.I.B.A., Past: Album of Portraits of, 483.

Prior, Edward S.: THE STATUES OF WELLS, WITH SOME CONTEMPORARY FOREIGN EXAMPLES, 325; College Planning, 392.

PRIZES AND STUDENTSHIPS 1904: Deed of Award, 158; REVIEW OF WORKS SUBMITTED FOR [James S. Gibson], 169; Mr. Saxon Snell's Bequest, 174; Award of Prizes, 180; Drawings for Exhibition in the Provinces, 211; Subjects set for 1905, 246.

Professional Defence, Board of, Proposed Establishment of, 395.

Prynne, G. H. Fellowes: Plaster Decoration, 269.

Q

QUANTITIES, Taking out, 533.

Queen Victoria Memorial, Calcutta, 444.

R

REGISTRATION OF ARCHITECTS [Professor Beresford Pite].—Summary of the Bill of 1903, 221; Registration involves Testing of Qualification, 223; What is an Architect? *ib.*; Architecture a Unity of Science and Art, 224; The Testing of this Dual Quality, 225; The Scope of Scientific Examination, 226; Business Examination, 228; Examination in Artistic Qualification, *ib.*; Ineffectiveness of Registration, 231; Effect of Registration on Education, *ib.*; Risk and Limitations of Examinations in Architecture, 232; Present need for Freedom without Registration, 233.

Discussion, 249.

— — — STATUTORY TRAINING AND [W. Howard Seth-Smith].—The Main Point of Agreement, 234; Artistic Qualification essential to an Architect, 235; Can Artistic Qualifications be tested by Examination, *ib.*; What the Public require in an Architect, *ib.*; Injustice of Competition with the unqualified, 236; Closer Relationship of Architecture with the Sister Arts would result from Registration, *ib.*; The Character of the Training required for Architects, 237; The Value of Examinations, *ib.*; Art Tests to be imposed on Architectural Students, *ib.*; The A.A. Students' Memorial for an Architectural Diploma, 238; Alleged disastrous Effects of Registration, *ib.*; Effects of Registration on the Institute, *ib.*; Pessimistic

Views not borne out by Precedent, *ib.*; The Royal College of Surgeons and the Law Society, 239.

Discussion, 249.

REGISTRATION OF ARCHITECTS.—The President's Views, 3; Mr. G. A. T. Middleton on the Existing Bill, 27; Mr. Butler Wilson on, 86; Discussion at the Institute, 126; Mr. H. K. Bromhead on, 178; Papers on, by Professor Beresford Pite, 221, 234; Discussion at the Leeds and Yorkshire Society, 250; Mr. W. H. Seth-Smith on, 320; Statement by the President, 342; Reference to, in the Annual Report, 356; The First Meeting of the Institute Committee, 374; Correspondence between Messrs. W. Gillbee Scott and Charles Heathcote, 395; Professor Beresford Pite on, at Cardiff, 447.

Reilly, Professor C. H.: Appointment at Liverpool University, 212.

Reinstatement of Member, 115.

REPORT OF THE COUNCIL FOR THE OFFICIAL YEAR 1903-04.—Obituary, 353; Royal Gold Medal, *ib.*; Membership, *ib.*; Examinations, 354; Prizes and Studentships, *ib.*; Annual Dinner and Social Functions, 355; Contract Form, *ib.*; Ancient Lights, *ib.*; Building Regulations, *ib.*; British Museum Extension, *ib.*; Southwark Bridge, *ib.*; Registration and Education, 356; Public Works and Municipal Officials, *ib.*; Liverpool University, 357; Congresses and Public Committees, *ib.*; Portraits, Memorials, &c., *ib.*; Competitions, *ib.*; Government Buildings, 358; Finance, 359; Miscellaneous, *ib.*; Reports of the Standing Committees, *ib.*; Balance-sheets, 365; Auditors' Report, 367.

Discussion: John Slater, 368, 370; Wm. Woodward, 368, 371; H. T. Bonner, 370; Professor Beresford Pite, *ib.*; Mr. R. F. Chisholm, *ib.*; Edmund Wimperis, *ib.*

REVIEW OF WORKS SUBMITTED FOR PRIZES AND STUDENTSHIPS 1904 [James S. Gibson], 169.

REVIEWS.—

Anderson, W. J., and R. Phené Spiers: *Architecture of Greece and Rome* [Frank Baggallay], 24.

Atkinson, T. D.: *English Architecture* [William H. Thorp], 511.

Baker, H.: *Stratford-upon-Avon* [Arthur S. Flower], 68.

Bernard, Rev. J. H.: *St. Patrick's, Dublin* [F. Batchelor], 321.

British School at Athens: *Phylakopi* [Archibald C. Dickie], 529.

Choisy, A.: *L'Art de bâtir chez les Egyptiens* [R. Phené Spiers], 161.

Clark, T. M.: *Building Superintendence* [Sydney B. Beale], 131.

Clarke, J. W.: *Lectures to Plumbers* [F. Chatterton], 163.

Cranage, Rev. D. H. S.: *Churches*

- of Shropshire [Arthur S. Flower], 162.
- Don, J. W.: *American Architecture* [H. A. Satchell], 534.
- Gourlay, Chas.: *Building Construction* [W. G. Wilson], 132.
- Green, J. R.: *Stray Studies* [Paul Waterhouse], 175.
- Hardy, Edward: *Graphic Statics* [Lewis Solomon], 377.
- Jennings, A. S.: *Painting and Decorating*, 446.
- Leaning, John: *Quarterly Surveying* [Wm. Woodward], 533.
- Middleton, G. A. T.: *Stresses and Thrusts* [Lewis Solomon], 377.
- Mitchells' Brickwork and Masonry [F. Dare Clapham], 322.
- Murphy, B. S.: *Wrought Ironwork* [Henry Tanner, jun.], 535.
- Newton, Ernest: *Country Houses* [F. Bligh Bond], 27.
- Norman, P.: *Halls of the City Guilds* [W. Campbell Jones], 163.
- Passmore, A. C.: *Technical Terms in Building* [W. E. V. Crompton], 379.
- Perkins, Rev. T.: *St. Albans* [A. W. Anderson], 66.
- Reade, T. M.: *Evolution of Earth Structures* [Francis Hooper], 348.
- Rowe, Stuart H.: *Lighting of Schoolrooms* [A. H. Ryan-Tenison], 536.
- Sturgis, Russell: *How to Judge Architecture* [Walter Millard], 370.
- Thatcher, A. G. H.: *Scaffolding* [Frank Caws], 378.
- Richmond Palace [Ralph Nevill], 177.
- Roman Forum, Exploration of, by Comm. Boni, 484.
- Rome, British School at: Annual Report, 45.
- Royal Academy £200 Studentship, 115.
- Royal Gold Medal 1904: Election of M. Choisy, 240, 251; President's Address at the Presentation, and M. Choisy's Reply, 449; Remarks by Professor Aitchison, 452; R. Phené Spiers, 453; Sir L. Alma-Tadema, R.A., 454; M. Choisy's further acknowledgments, 483.
- R.I.B.A. Recommendations re London Building Acts Amendment Bill, 181, 360, 363.
- ROYAL VICTORIA HOSPITAL, BELFAST: ITS INITIATION, DESIGN, AND EQUIPMENT [Wm. Henman and Henry Lea], 89.—The Design, 90; Plenum Ventilation, *ib.*; Mr. Henman's Letter in *The Builder*, 92; Plan, 93; Plenum System investigated: Professor Byers' testimony, 94; Architectural Treatment, 95; Site and Disposition of the Building, 96; Arrangement of Wards, 97; Sanitary Towers, *ib.*; The Extern, 98; Operating Room: Plan and Sections, 99; Lighting, 100; Administrative Buildings, *ib.*; Furniture and Fittings, 101; Caution re Adoption of Plenum System, 102.—THE ENGINEERING WORK, 102; Fans and Air-ducts, 104; Plans and Sections, 105; Cleansing Screens, 106; Heating, 107; Hot-water Supply, 108; Cold-water Supply, 109; Water Steriliser, *ib.*; The Laundry, 110; Electric Lighting, *ib.*
- Discussion: Sir John Holder, 110; Dr. Christopher Childs, 111; A. Saxon Snell, 112; Aston Webb, *ib.*; The Authors, 112, 113, 487, 508.
- Royle, William Alfred: obituary notice, 445.
- Russell, S. Bridgman: Liverpool Cathedral Competition, 76.
- Ryan-Tenison, A. H.: Lighting School-rooms (review), 536.
- S**
- St. ALBAN's, 66.
- St. Andrea, Genoa [John Hebb], 487.
- St. Patrick's, Dublin, 321.
- Satchell, H. A.: *American Architecture* (review), 534.
- Scaffolding, 378.
- School of Art Wood-carving, 557.
- Science Committee: Annual Report, 364; Annual Elections, Votes polled, 444; Council Appointments, 483.
- Scott, E. Kilburn: Electric Generating Stations, 347.
- Scott, Gilbert: Liverpool Cathedral Competition, 76.
- Scott, W. Gillbee: The Registration Question, 395.
- Scottish Architecture, Ancient. See BOTHWELL CASTLE.
- SCREENS AND SCREENWORK IN THE ENGLISH CHURCH.—Part I. PRE-REFORMATION [F. Bligh Bond].—A Landmark of Christian Worship, 537; Origin and Development of the Screen, 538; Early British Churches, *ib.*; Survival of Early British Type of Church through Roman and Saxon Times, 539; Screens at Reculver, St. Pancras Canterbury, and Brixworth, *ib.*; Use of the Veil or Wall in the Early Church, 540; Tripartite Division of the *ecclesia*, 540, 541; Reversion to British Models in later Saxon Church, *ib.*; Illustrations of Arcades of Early and Later Periods, 540, 541; The Norman Influence, 542; Altars of the Holy Rood, 543; The Hagioscope, *ib.*; Ancient Use of Cancelli in Chancel Opening, *ib.*; The Solid Barrier Screen, 544; Full Development of Double Screen, Fourteenth Century, 545; The Compton Bassett Type, 546; Wooden Screenwork, Thirteenth Century, *ib.*; Stonework Ornament imitated in Wooden Screens, 547; Wooden Ornament imitated in Stone Screens, *ib.*; The Double Screen of Llanelieu, 548; Progress of Wooden Screenwork, *ib.*; West-country Groined Screen, 549; West
- Quantoxhead, *ib.*; Screens of the Norfolk pattern, 550; Points of Difference and Resemblance in West and East Country Screens, 551; Painted Panels, 552; Position of the Screen, *ib.*; Types of Screenwork summarised, *ib.*; Screens dividing Parish Church from Monastic Church, 553; Secondary Screens, *ib.*; Lofts over both Sanctuary and Rood Screens, 554; Principal Function of Rood Loft, 555; The Tester over the Altar, *ib.*
- Sculpture applied to Architecture. See WELLS, STATUES OF.
- Sculptures, Foreign, contemporary with the Wells Statues, 336.
- Secretary R.I.B.A. and the Spanish Architects, 445.
- Sessional Papers 1904-5, Arrangements for, 528.
- SESSIONAL AND OTHER PAPERS:—
- A Holiday in Portugal [W. Crum Watson], 465.
- Architects out of Office Hours [Walter Millard], 461.
- Armoured Concrete Column, Test of an [W. Dunn], 48.
- Bothwell Castle [G. S. Aitken], 413.
- Biological Disposal of Sewage from Isolated Buildings [Professor Frank Clowes], 193.
- Collegiate Buildings, Planning of [Rev. J. B. Lock], 381.
- Coloured Glass: Royal Academy Lectures [Professor Aitchison], 53.
- Criticism of Works sent in for Prizes and Studentships [James S. Gibson], 169.
- Delphi.—Le Trésor de Cnide et les Monuments de l'Art Ionien à Delphes [J. T. Homolle], 29.
- English Architecture of the Fifteenth Century [W. H. Wood], 489.
- Lead Architecture [J. Starkie Gardner], 141.
- London Building Acts Amendment: The Institute Recommendations, 181.
- Mitla, the Ruins of [Charles Grove Johnson], 513.
- Modern Domestic Architecture [Alfred E. Corbett], 117.
- Newcastle, Development of [J. Walton Taylor], 134.
- Notes sur deux Epaves Egyptiennes conservées à Edfou [A. Choisy], 503.
- Notes on the Design and Construction of Buildings connected with the Generation and Supply of Electricity known as Central Stations [C. Stanley Peach], 279.
- Notes on the Stresses in Framed Spires and Domes [W. Dunn], 381.
- Perth, The City of, Western Australia [R. M. Hamilton], 15.
- Plaster Decoration [J. D. Crace], 253.
- President's Opening Address, 1; Address to Students [Aston Webb], 165.

- Registration of Architects [Professor Beresford Pite], 221.
 Report of the Council for the Official Year 1903-04, 353.
 Royal Gold Medal Addresses [Aston Webb, R.A., and M. Choisy], 449.
 Royal Victoria Hospital, Belfast: its Initiation, Design, and Equipment [Wm. Henman and Henry Lea], 89.
 Screens and Screenwork in the English Church up to the Reformation [F. Bligh Bond], 537.
 Smoky Chimneys [Hastwell Grayson], 271.
 Some Reflections on Architectural Education and Examination suggested by the Perusal of the Reports of the Mosley Education Commission 1903 [W. Howard Seth-Smith], 371.
 Statutory Training and Registration of Architects [W. H. Seth-Smith], 234.
 Vanbrugh, Sir John: Architect and Dramatist [Robert P. Oglesby], 213.
 Wells, The Statues of, with some Contemporary Foreign Examples [Edward S. Prior and Arthur Gardner], 325.
 Seth-Smith, W. Howard: Lead Architecture, 156; SOME REFLECTIONS ON ARCHITECTURAL EDUCATION AND EXAMINATION SUGGESTED BY THE PERUSAL OF THE REPORTS OF THE MOSLEY EDUCATION COMMISSION, 371; THE STATUTORY TRAINING AND REGISTRATION OF ARCHITECTS, 234.
 SEWAGE, BIOLOGICAL DISPOSAL OF, FROM ISOLATED BUILDINGS [Professor Frank Clowes].—The System adopted at Christ's Hospital, Horsham, 193; Explanation of Biological Treatment, and of the Method of adapting it, *ib.*; General Results obtained, 195; Trials at Horsham, 196; Plan of Septic Tanks at Horsham [folding plate]; Views of Tanks at Horsham, 198; Details of Construction and Treatment, 199; Advantages of the System, 200.
 Discussion: Dr. Gilbert Fowler, 201, 205, 206; Harold Griffiths, 203; F. J. Willis, 203; R. Langton Cole, *ib.*; E. Penfold, 204; Dr. Armstrong, *ib.*; Osborne Smith, *ib.*; E. Vincent King, *ib.*; Max. Clarke, *ib.*; Frank Lishman, *ib.*; Aston Webb, 205; The Author, 206, 207; E. B. Pike, 207; D. J. Ebbetts, 208.
 Sewage, Treatment of, by Bacteria, 249.
 Sheffield Society of Architects. *See* ALLIED SOCIETIES.
 Shropshire Churches, 162.
 Simm, Ernest: obituary notice, 484.
 Slater, John: M. Homolle's Paper on Delphi, 42; Liverpool Cathedral Competition, 77; The Fellowship Question, 242; Annual Report, 368, 370; The Registration Question Committee, 374; Appointment as Hon. Secretary of Board of Architectural Education, 455.
 Smirke, Sydney: Donations to the Library, 251.
 Smith, Osborne: Biological Disposal of Sewage, 204.
 Smith, Percival Gordon: obituary notice, 247.
 Smoke Abatement, 81.
 SMOKY CHIMNEYS [Hastwell Grayson], 271.
 Snell, A. Saxon: Plenum Ventilation, 112, 433; The Fellowship Question, 242; Suggestions *re* Conduct of Competitions, 244.
 Snell, Henry Saxon: obituary notice, 160; Bequest to the Institute, 174.
 Société Centrale des Architectes Français, 174.
 Solomon, Lewis: Stresses (review), 377.
 Southwark Bridge: Correspondence between the Institute and the City Corporation, 126, 360.
 Spiers, R. Phené: M. Tournaire's Delphi Drawings, 44; Lead Architecture, 155; Egyptian Architecture (review), 161; Nonsuch Palace and Stucco Duro, 176; Plaster Decoration, 268; M. Choisy and his archaeological researches, 453.
 Stained Glass at the Abbey, 131.
 Standing Committees: Annual Reports, 359; Elections, 443; Council Appointments, 483.
 Stannus, Hugh: The Fellowship Question, 243; The Wells Statues, 340.
 Statues of Wells. *See* WELLS.
 Statutory Examinations. *See* EXAMINATIONS.
 STATUTORY TRAINING AND REGISTRATION OF ARCHITECTS [W. Howard Seth-Smith], 234.
 Stokes, Leonard: Liverpool Cathedral Competition, 75, 79.
 Strand Improvement, 10, 21.
 Stratford-upon-Avon, 68.
 Stresses, 377.
 STRESSES IN FRAMED SPIRES AND DOMES. NOTES ON [W. DUNN].—Vertical and Symmetrical Loads only, 401; Lateral Forces and Irregular Loading, 407.
 STUDENTS. ADDRESS TO [Aston Webb].—Pleasures of an Architect's Work, 165; Habit of Reading to be cultivated, 166; Study of Painting and Sculpture, *ib.*; Travel, *ib.*; Sketching and Drawing, *ib.*; Archaeology, 167; Geology and Chemistry, *ib.*; Music, *ib.*; Criticism, *ib.*; Sociability, *ib.*; Relations with Workmen, 168; Friendship with Professional Brethren, *ib.*; Working out Competition Problems, *ib.*; Contemplation of completed Work, *ib.*; The Dreamer and the Practical Man both required, *ib.*; Tennyson's Message to Young Men, *ib.*
 Students' Drawings criticised [James S. Gibson], 169.
 Studentships and Prizes. *See* PRIZES.
 Suburbs, The Formation of, 529.

T

- TANNER, HENRY: Knighthood conferred upon, 459.
 Tanner, H., jun.: Wrought Ironwork (review), 535.
 Tasker, Francis William: obituary notice, 396.
 Taylor, J. Walton: Presidential Address to the Northern Association, 133; Newcastle Improvements, with Plans, 135.
 Tenants' Obligations: Some Recent Decisions, 212.
 Test of an Armoured Concrete Column [W. Dunn], 48.
 Thorp, William H.: English Architecture (review), 511.
 Tournaire's (M.) Drawings: Exhibition of, 21, 30, 43.
 Travellers' Joy [Paul Waterhouse], 175.
 TREASURY OF CYNOS AND THE MONUMENTS OF IONIAN ART AT DELPHI [J. T. Homolle], 29.
 Trevail, Silvanus: decease announced, 47.
 Truro Cathedral, 7.

V

- VACHER, SYDNEY: Liverpool Cathedral Competition, 75, 81.
 VANBRUGH, SIR JOHN, ARCHITECT AND DRAMATIST [Robert P. Oglesby].—Dramatic Work, 213; Castle Howard, 215; Seaton Delaval, 216; King's Weston, *ib.*; Fleurs Castle, Kneller Hall, Grimsthorpe, 217; Blenheim, 217.
 Vanbrugh, Sir John, 248.
 Ventilation. *See* PLENUM SYSTEM.
 Victoria University, Students from, exempted from Intermediate Examination, 73.
 Victorian (Royal) Institute of Architects, Proceedings of, 507.

W

- WALES, PRINCE OF, accepts Office for Seventh International Congress, 528.
 Wales, Nathaniel Young Armstrong: obituary notice, 116.
 Walker, Benjamin: Lead Fanlights, 177.
 War Office Barracks Construction Department, 342.
 Waterhouse, Paul: Travellers' Joy (review), 175; The Fellowship Question, 241, 243.
 Watson, T. H.: Liverpool Cathedral Competition, 77.
 Watson, W. Cram: A HOLIDAY IN PORTUGAL, 465.
 Webb, Aston: Opening Address, 1; Liverpool Cathedral Competition, 76, 78; Hospital Planning and Plenum Ventilation, 112; Architects' Registration, 126, 129; Lead Archi-

- ecture, 156; January "At Home," 158; ADDRESS TO STUDENTS, 165; Prizes and Studentships 1904, 174; Biological Disposal of Sewage at Horsham, 205; The Fellowship Question, 240; Suggestions *re* Conduct of Competitions, 244, 245; College Planning, 304; The Wells Statues, 341; The late Messrs. Tasker and Birch, 397; Plenum Ventilation, 441; Ruling *re* objection to a candidate at moment of election, 446; Address on the Presentation of the Royal Gold Medal to M. Choisy, 449; Speech at the Unveiling of the Penrose Memorial, 455; Appointed Chairman of Board of Architectural Education, 455; The Fourth "At Home," 457; Vote of Thanks to, on retiring from the Presidentship, 457; Speech in reply, 458.
- Webb, W. Arthur: St. Bartholomew the Great, 507.
- WELLS, THE STATUES OF, WITH SOME CONTEMPORARY FOREIGN EXAMPLES [Edward S. Prior].—Condition of the Statues, 325; Their Historic and Artistic Value, 326; Recent Overhauling and Photographing, *ib.*; Technique of the Sculptures, 327; The Signature of the Figure Sculptor, *ib.*; Development of English Masoncraft as revealed by the Statues, 328; Sub-species of the Craft, *ib.*; Sculpture of the Early Gothic School in the West of England, 329; Progress of the Craft traced, 330; Growth of the Art of the Free Statue in Stone, 331; The Statues the Work of Wells Masons and not of Foreign Sculptors, *ib.*; Distinctive Character of the Wells Work compared with Contemporary Work at Winchester, Westminster, Lanercost, and Lincoln, 332; Comparison with Contemporary Work abroad, 333; The Author's Conclusions, 334; Evolution of Drapery as accomplished by the Wells Masons, 335.
- WELLS, THE STATUES OF, CONTEMPORARY FOREIGN SCULPTURES [Arthur Gardner], 336; The Figures at Chartres, 337; Distinctive Features of the Foreign Work, *ib.*; Sculptures at Amiens, 338; Mid-Thirteenth-century Work at Rheims, *ib.*; Sculptures of the Ile de France and German Schools, *ib.*
- Discussion: W. H. St. John Hope, 339; Professor Lethaby, *ib.*; Professor Beresford Pite, 339; Hugh Stannus, 340; Conrad Dressler, *ib.*; Aston Webb, 341; E. S. Prior, *ib.* — — — — [Clement Heaton], 486.
- Whitgift Hospital: The Council's Deputation to the Croydon C.C., 459.
- Willis, F. J.: Biological Disposal of Sewage, 203.
- Willson, Thomas John: obituary notice, 46.
- Wilson, Butler: Presidential Address to Leeds and Yorkshire Society, 83; Registration of Architects, 86, 127, 251; Address as retiring President of the Leeds and Yorkshire Society, 323.
- Wilson, W. G.: Building Construction (review), 132.
- Winperis, Edmund: Annual Report, 370.
- Windsor, Lord: The President's Views *re* a Board of Control for Public Buildings and Improvements, 12; Undertaking to lay them before the Government, *ib.*; Trees in London Streets, *ib.*
- Wood, W. H.: ENGLISH ARCHITECTURE OF THE FIFTEENTH CENTURY, 489.
- Woodward, Wm.: Liverpool Cathedral Competition, 73, 77, 78, 80, 81; The Fellowship Question, 241, 243; Annual Report, 368, 371; Taking out Quantities (review), 533.
- Woolfall, John: Liverpool Cathedral Competition, 76, 80.
- Wrought Ironwork, 535.

LIST OF ILLUSTRATIONS.

- PORTRAIT OF M. CHOISY, *Royal Gold Medallist 1904—frontispiece.*
- THE CITY OF PERTH, WESTERN AUSTRALIA.
General View, 15.
Government House and Grounds, 17.
Astronomer's Residence and Observatory, 17.
Moir's Chambers, 18.
Congregational Church, 19.
Hay Street, showing Town Hall Tower, 19.
- THE TREASURY OF CNIDOS, AND THE MONUMENTS OF IONIAN ART AT DELPHI.
Western façade restored, facing p. 29.
The Treasury from the South, 29.
Plan of the Excavations, 31.
Sculptured Decoration, 33, 34.
Western Frieze, 35.
Southern Frieze, 36.
Eastern Frieze, 37.
Northern Frieze, 39.
- TEST OF AN ARMoured CONCRETE COLUMN.
Diagrams, 48, 49.
View of Column after Failure, 50.
- COLOURED GLASS.
Window, Suleimanyeh, Constantinople, 57.
Window in Church of SS. Giovanni e Paolo, Venice, 61.
- ST. ALBAN'S.
View of the Cathedral before Restoration, 66.
St. Michael's Church, St. Alban's: recently demolished Tower, 87.
South Nave Arcade of the Cathedral, showing Junction of 13th and 14th century work, 68.
- ROYAL VICTORIA HOSPITAL, BELFAST.
View from North-west, 89.
Principal Entrance, Administrative Department, 91.
View from South-west, 91.
Ground Floor Plan, 93.
The Connecting Corridor, 95.
A Sanitary Turret, 96.
Central Hall of "Extern" Department, 97.
One of the Wards, 98.
Operating Room: Plan and Sections, 99.
Plans showing Arrangement of Engines and Fans, 105.
Fan-shaft, 107.
The Washhouse, 109.
- MODERN DOMESTIC ARCHITECTURE.
Details of Wall, Roof, &c., 118, 119, 120.
Sketch Detail for Floor, 120.
Fireplace, 121.
House at Warford, Cheshire: Plan and Perspective View, 122.
A Cheshire House: Plan and Perspective View, 123.
Banney Royd, Huddersfield, 125.
- DEVELOPMENT OF NEWCASTLE.
Isometrical Plan of Proposed Improvement of Newcastle, 1834. *Between 136 and 137).*
Plan of Projected New Market and Streets, 1834.
- BIOLOGICAL DISPOSAL OF SEWAGE FROM ISOLATED BUILDINGS.
Plan of Septic Tanks at Christ's Hospital, Horsham — *folding plate.*
Views of the same, 198.
- SIR JOHN VANBRUGH.
Castle Howard: Bridge and Mausoleum, 213.
" " South Front from the Lake, 215.
" " North Front, 217.
" " Upper Part of Hall, 219.

PLASTER DECORATION.

Stucco, First Century A.D., Villa Farnesina, Rome, 253.
Ceiling Decoration, Via Latina, Rome, 256.
Mosque of Ibn Tooloon, Cairo, 257.
Ceiling, Sala Regia, Vatican, 260.
Decoration at Fontainebleau: Primaticcio's Work, 261.
Galerie d'Apollon, The Louvre, 262.
Decoration of Cove, Royal Hospital Chapel, Kilmainham, 264.
Plaster Ceiling of the same, 265.
Ceiling of Board Room, New River Company's Offices, 267.
Santa Maria delle Grazie, Milan, 460.

DESIGN AND CONSTRUCTION OF ELECTRIC POWER CENTRAL STATIONS.

Works at Grove Road, St. John's Wood, facing 279.
Works at Ipswich, 279.
Water Power Station at Tivoli, 284.
Water Power Station of Municipality of Geneva, 285.
Water Power Station of Rheinfelden, 286.
Deptford Power Station, 288.
Edison Station, Philadelphia, 292.
Bristol Station, 293.
Power Station, Munich, 294.
Municipal Power Station, Vienna, 295.
McDonald Road Station, Edinburgh, 298.
Stuart Street Station, Manchester, 299.
Pigeon House Fort Station, Dublin, 302.
Chiswick Electric Power Station, 304.
Model of Entrance Pavilion, Substation, Duke Street, Mayfair, 307.
Italian Garden and Motor Generator Station, 308.
Chimney Shaft, St. Luke's Station, Oak Wharf, City Road, 309.
Chimney Shaft, Munich, 310.

Sheets of Plans.

- i. and ii. Grove Road Power Station, St. John's Wood.
- iii. Chelsea Station.
- iv. Stuart Street Station, Manchester.
- v. Dublin Electricity Works.
- vi. and vii. Kingsbridge Station, New York.
- viii. and ix. Vienna Station.
- x. Berlin Station.
- xi. and xia. Amsterdam Station.
- xii. Duke Street Station, Mayfair.
- xiii. Manhattan Company, New York.
- xiv. Bennett Street Station, Manchester.
- xv. and xvi. First Power Station, Geneva.

xvii. St. Luke's Central Station, City Road.
xviii. Battersea Vestry.
xix. and xx. Ipswich Station.
Bust of John Gibson, 319.
St. Patrick's Cathedral, Dublin, 322.

STATUES OF WELLS, WITH SOME CONTEMPORARY FOREIGN EXAMPLES.

Effigy in South Aisle of Choir, 325.
The Madonna, Central Doorway, 327.
Coronation of the Virgin, 327.
"Bishop" and "King," 328.
"Prince" and "Notable"; "Orators," 329.
"Seated King"; "Long Lady," 330.
Bishop and Lady, 331.
"Doctor"—Figure on West Front, 332.
"Panel" Figure at N.W. Angle, 332.
"Panel" Figure on North Tower, 332.
"Image" Figure, 333.
"Deacons" on North Tower, 333.
Westminster Chapter-house, 334.
"Lincoln": South door of Angel Choir, 335.
Lanercost, on West Gable, 336.

MEMORIAL TO ALFONSO XII., MADRID, 345.

LEEDS AND YORKSHIRE SOCIETY PRESIDENTIAL BADGE, 352.

PLANNING OF COLLEGIATE BUILDINGS.

Gonville and Caius College, St. Michael's Court, Cambridge, 387.
N.E. Corner of Tree Court: Plan and suggested Improvement, 389.

NOTES ON THE STRESSES IN FRAMED SPIRES AND DOMES—25 DIAGRAMS.

BOTHWELL CASTLE.

Banqueting Hall, 413.
Plans, 415.
Various details, 416, 417.
Masons' marks, 418.
S.E. View, 419.
Chapel and S.E. Tower, 420.
N. Wall of Chapel, 421.
Turrets, 422.
Fireplace, 423.
General View, 426.

A HOLIDAY IN PORTUGAL.

Old Cathedral, Coimbra: Plan, 466.
Abbey Church, Alcobaça, 467.
Cloister of Dom Diniz, Alcobaça, 467.
Cathedral, Evora, 468.
The same: Lantern from Cloister, 469.
St. Mary of Victory, Batalha, 470.
West Front, Batalha, 470.
Capellas Imperfeitas, Batalha, 471.
Convent of the Order of Christ, Thomar, 472.

The Templar Church, Thomar, 472.
Nave of Church, Convent, Thomar, 473.
Monastery of Belem, Plan, 474.
Abbey Church, Belem, 475; Cloisters, *ib.*

ENGLISH ARCHITECTURE OF THE FIFTEENTH CENTURY.

Kingston Seymour, Somersetshire, 489.
East Window, Eggleston Abbey, 489.
North Transept Window, Durham, 490.
Mouldings, 491.
Arcades, 492.
Doorway, Christ Church, Oxford, 493.
Window Tracery, 493.
Diagrams of Vaulting, 495.
Roofs, 496.
Buttresses, 497.
Tracery, 499.
Finials, &c., 501.

DEUX ÉPURES ÉGYPTIENNES À EDFOU—Diagrams.

RUINS OF MITLA, MEXICO.

Principal Façade, Palace of the Columns, 513.
Plans, Sections, and Details, 514, 515, 516.
Ruins of East Hall, 518.
Entrance to Hall of Monoliths: elevation, 519.
Hall of Monoliths, 520.
Doorway of Passage, 520.
The Patio of Mosaics: various views, 521.
Mosaic Pattern, 522.
Manner of hanging a Curtain before a door, 523.
Viollet-Le-Duc's Restoration of Hall of Monoliths: section, 523.
Temples roofed with Thatch, 525.
Modern Thatched Hut, Mitla, 526.

SCREENS AND SCREENWORK IN THE ENGLISH CHURCH.

Detail of Rood-screen, South Pool Church, S. Devon, 537.
Screens in a Coptic Church at Cairo, 538.
Chancel Arcade, Reculver, 539.
Various Types, 540, 541.
Stebbing and Great Bardfield, 542.
Hagioscope, Baulking Church, 543.
Capel-le-Ferne, 544.
Double Screen, Compton Bassett, 545, 546.
Decorated Screen, Leake Church, 546.
Llanellieu, 548.
Marwood, 550.
Rood Screen, St. Audries, W. Somerset, 551.
Sanctuary Screen, Tawstock, Devon, 553.
Screen and Rood-loft, Staverton Church, Devon, 554.

LIST OF CONTRIBUTORS, AUTHORS OF ADDRESSES, PAPERS, &c.

AND OF THOSE WHO HAVE JOINED IN THE DISCUSSIONS AT GENERAL MEETINGS.

- Adams, Maurice B. [F].
 Aitchison, Professor, R.A. [F].
 Aitken, G. S., F.S.A.
 Alma-Tadema, Sir L., R.A. [H.F].
 Anderson, A. Whitford [A].
 Anderson, J. Macvicar, F.R.S.E. [F].
 Armstrong, Dr. Henry E., F.R.S.
 Ashlin, G. C., R.H.A. [F].
 Aumonier, W.
 Baggallay, Frank [F].
 Batchelor, F., R.H.A. [F].
 Beale, Sydney B. [A].
 Beaumont, J. W. [F].
 Bedingfield, Waller K.
 Bibby, George H.
 Blashill, Thomas [F].
 Blomfield, Reginald, M.A.
 Bond, F. Bligh [F].
 Bonner, H. T. [A].
 Brodie, C. H. [A].
 Bromhead, H. K. [F].
 Bulmer, G. Bertram [F].
 Burnet, John J., A.R.S.A. [F].
 Byers, Professor.
 Carøe, W. D., M.A., F.S.A. [F].
 Caws, Frank [F].
 Champneys, Basil, B.A.
 Chapman, H.A. [A].
 Chatterton, F. [A].
 Childs, Dr. Christopher.
 Chisholm, R. F. [F].
 Choisy, Auguste [Hon. Corr. M.].
 Clapham, F. Dare [A].
 Clarke, Max. [F].
 Clere, F. de J. [F].
 Clowes, Professor Frank.
 Colecutt, Thomas E. [F].
 Cole, R. Langton [F].
 Corbett, Alfred E. [A].
 Crace, J. D. [H.A.].
 Crompton, W. E. V. [A].
 Cross, A. W. S., M.A. [F].
 Dibdin, W. J.
 Dickie, Archibald C. [A].
 Dressler, Conrad.
 Dunn, Wm.
 Ebbetts, D. J. [A].
 Emerson, Sir Wm. [F].
 Evans, Dr. Arthur J., F.R.S.
 Flower, Arthur S., M.A., F.S.A. [A].
 Fowler, Dr. Gilbert.
 Frampton, A. [A].
 Gardner, Arthur.
 Gardner, J. Starkie.
 Geymüller, Baron von [Hon. Corr. M.].
 Gibson, James S. [F].
 Gilbert, W.
 Gotch, J. Alfred, F.S.A. [F].
 Graham, Alex., F.S.A., Hon. Secretary.
 Grayson, Hastwell, M.A. [A].
 Green, T. Frank [A].
 Griffiths, Harold [A].
 Hall, Edwin T. [F].
 Hamilton, R. M. [A].
 Hare, Henry T. [F].
 Heathcote, Charles [F].
 Heaton, Clement.
 Hebb, John [F].
 Henman, W. [F].
 Holden, Sir John.
 Homolle, J. T., D.Litt. Cantab. [Hon. Corr. M.].
 Hooper, Francis [F].
 Hope, W. H. St. John, M.A.
 Hudson, E. W. [A].
 Hutchinson, C.E. [A].
 Ibberson, H. G. [A].
 John, W. Goscombe, A.R.A.
 Johnson, C. G. [F].
 Jones, W. Campbell [F].
 King, E. Vincent [A].
 Kitson, S.
 Lanchester, H. J. [F].
 Lanchester, H. V. [A].
 Langston, H. Hardwicke [A].
 Lea, Henry, M.Inst.C.E.
 Lethaby, Professor W. R.
 Lishman, Frank [A].
 Lock, Rev. J. B., M.A.
 Locke, W. J., B.A., Secretary.
 Lovegrove, G. H.
 Lovegrove, Henry [A].
 Lucas, Geoffrey [A].
 Macmillan, G. A.
 Mathews, J. Douglass [F].
 Mayston, A. R. [A].
 Middleton, G. A. T. [A].
 Millard, Walter [A].
 Monkman, T.
 Munby, Alan E.
 Murray, Dr. A. S. [H.A.].
 Myres, J. L., M.A.
 Nevill, Ralph [F].
 Nicholl, S. J. [A].
 Oglesby, Robert P.
 Parker, A. S. [F].
 Parry, W. Kaye, M.A., B.E. [F].
 Peach, C. Stanley [F].
 Penfold, E. [A].
 Pick, S. Perkins [F].
 Pike, E. B.
 Pite, Professor Beresford [F].
 Prior, Edward S., M.A.
 Prynn, G. H. Fellowes [F].
 Russell, S. Bridgman [F].
 Ryan-Tenison, A. H. [F].
 Satchell, H. A. [A].
 Scott, E. Kilburn.
 Scott, W. Gillbee [F].
 Seth-Smith, W. Howard [F].
 Slater, John, B.A. [F].
 Smith, J. Osborne [F].
 Snell, A. Saxon [F].
 Solomon, Lewis [F].
 Spiers, R. Phené, F.S.A. [F].
 Stannus, Hugh, A.R.C.A. [F].
 Stokes, Leonard [F].
 Tanner, H., jun. [A].
 Taylor, J. Walton [F].
 Thorp, Wm. H. [F].
 Vacher, Sydney [A].
 Walker, Benjamin [A].
 Waterhouse, Paul, M.A. [F].
 Watson, T. H. [F].
 Webb, Aston, R.A., F.S.A., President.
 Webb, W. Arthur [A].
 Willis, F. J.
 Wilson, Butler [F].
 Wilson, W. G. [A].
 Wimperis, Edmund [A].
 Windsor, Right Hon. Lord [H.A.].
 Wood, W. H.
 Woodward, Wm. [A].
 Woolfall, John [F].

THE LIBRARY.

ADDITIONS: 7TH OCTOBER 1903 — 10TH OCTOBER 1904.

THE REFERENCE LIBRARY.

Books and Pamphlets.

ADAMS (H.)—Designing ironwork, 2nd series, pt. iv.
pam. 80. Lond. 1903
ADAMS (M. B.) *Fellow*—As to the making of architects.
pam. sm. 80. Lond. 1904
BAILLIÈRE, TINDALL & CO., Messrs., the Publishers —
FERGUSON (R. B.)—Aid to the mathematics of hygiene.
12mo. Lond. 1904
BATSFORD (B. T.) the Publisher—THATCHER (A. G. H.)
—Scaffolding. 80. Lond. 1904
CLARKE (J. W.)—Lectures to plumbers, 2nd series.
40. Lond. 1903
BELL & SONS (Messrs. G.) the Publishers—BAKER (H.)—
The Collegiate Church of Stratford-on-Avon.
80. Lond. 1902
BERNARD (J. H.)—St. Patrick's Cathedral.
80. Lond. 1903
WAY (T. R.) & NORMAN (P.)—Ancient halls of the city
guilds. 40. Lond. 1903
BOND (F. BLIGH) *Fellow*—Devonshire screens and rood
lofts (pt. ii.) pam. 80. Lond. 1903
BROUGH (B. H.)—The mining of non-metallic minerals.
pam. la. 80. Lond. 1904
BUILDER (THE) the Publisher of—SUTCLIFFE (G. L.)—
Sanitary fittings and plumbing. 80. Lond. 1901
CARPENTERS COMPANY—FORBES (A. C.) & FISHER
(W. R.)—The adaptation of land for afforestation.
pam. 80. Lond. 1904
CAYLEY (H.) *Associate*—Holy Trinity Church, Rothwell,
Northamptonshire. 80. Kettering 1904
CHEETHAM (T. H.)—Haddon Hall.
pam. sm. 80. Bakewell 1903
CHOISY (A.) *Hon. Corr. M., Royal Gold Medallist.*—L'Art
de bâtir chez les Egyptiens. sm. fo. Paris 1904
CLARENDON PRESS, the Publishers — SANDAY (W.)—
Sacred sites of the gospels. 80. Oxford 1903
CONDER (J. B. R.)—Handbook of sewer and drain cases.
80. Lond. 1904
CRANAGE (D. H. S.)—Churches of Shropshire, pt. vi.:
The Hundred of Condover: The Hundred of Ford.
40. Wellington 1903
DOWSON (W.) M.A., M.D.—The Wellcome Physiological
Research Laboratories. pam. 80. Lond. 1903
EDITORS AND PROPRIETORS—
American Architect. 1903-04
Architect. 1903-04
Architects' & Builders'
Magazine. 1903-04
Architectural Record. 1903-04
Architectural Review. 1903-04
Art Journal. 1903-04
British Architect. 1903-04
Builder. 1903-04
Builder's Journal. 1903-04
Building, Engineering and
Mining Journal. 1903-04
Building News. 1903-04
California Architect. 1903-04
Canadian Architect &
Builder. 1903-04
Construction Moderne. 1903-04
Contract Journal. 1903-04
Engineering Magazine. 1903-04
Engineering Record. 1903-04
Estates Gazette. 1903-04
Furniture & Decoration. 1903-04
Gaceta de Obras Públicas.
1903-04
Indian & Eastern En-
gineer. 1903-04

Irish Builder. 1903-04
Journal of Decorative Art. 1903-04
Notes & Queries. 1903-04
Plumber & Decorator. 1903-04
Studio. 1903-04
Surveyor. 1903-04
EMDEN (WALTER) L.C.C.—PESTON (H.) & PALMER (C.)
—The bridges over the Thames within the county of
London. ob. fo. Lond. 1903
FOUCHER (A.)—Les bas-reliefs du Stûpa de Sikri.
pam. 80. Paris 1903
GEYMÜLLER (H. F. VON) *Hon. Corr. M.*—Michelagnolo
Buonarroti als Architekt. fo. Munich 1904
GIBBINGS (J. H.) *Associate* Pugin Studentship: Re-
port 1903. MS. 80. 1903
GLOVER (WM.) *Fellow*—HICK (W. S.)—Quis separabit?
80. Lond. 1903
GOURLAY (C.) *Associate*—Elementary building construc-
tion and drawing for Scottish students. 40. Lond. 1903
HEATON (CLEMENT)—Notre Dame de Neuchâtel et
l'architecture primitive de la Suisse.
pam. 40. Neuchâtel 1903
HEBB (JOHN) *Fellow*—W. E. D.—A Reminiscence of the
late Peter Paul Pugin. pam. mo. Lond. 1904
WHITING (F. A.)—Handicraft. pam. 80. Lond. 1903
Southampton: Exhibition of local antiquities.
pam. 80. Southampton 1904
HEIMANN (F. C.) *Hon. Corr. M.*—Die St. Markuskapelle
in Altenberg. pam. fo. Düsseldorf 1903
Die Wettbewerb zur Erlangung von Vorentwürfen für
den Bau einer Handels-Hochschule zu Köln.
pam. fo. Berlin 1903
INGELOW (BENJ.) *Fellow*—MURRAY (J. A. H.)—New
English Dictionary (*in progress*). fo. Oxford 1904
JENNINGS (A. S.)—Paint and colour mixing, 2nd ed.
la. 80. Lond. 1903 04
JOHNSTON (A. W.), F.S.A. Scot.—The Round Church
and Earl's Bâ of Orphir, Orkney.
pam. 80. Coventry 1903
KERSHAW (S. W.), M.A.—Oatlands in Weybridge.
pam. 80. Lond. 1903
KOCH (A.)—Academy architecture. 1903, vol. ii.
1904, vol. i. 40. Lond. 1903
KOTERA (J.)—Práce mč a mych Zâuku 1898 1901.
40. Prague 1903
LONDON COUNTY COUNCIL—Opening of Marble Hill,
Twickenham. pam. 40. Lond. 1903
LONGMANS, GREEN & CO. (Messrs.) the Publishers —
Rivington's Notes on building construction, vols. 1-2.
la. 80. Lond. 1904
Rowe (S. H.)—The lighting of school-rooms.
80. Lond. 1904
McLACHLAN (J.)—Pugin Studentship Report 1900.
MS. 80. 1900
MACMILLAN & CO. (Messrs.) the Publishers—CLARK
(T. M.)—Building Superintendence. 80. N. York 1903
STURGIS (R.)—How to judge architecture.
la. 80. Lond. 1904
MELDAHL (Prof. F.) *Hon. Corr. M.*—MELDAHL (F.) &
JOHANSEN (P.)—Det kongelige Akademi for de skønne
Kunster 1700 1904. 80. Copenhagen 1904
METHUEN & CO. (Messrs.) the Publishers—ATRINSON
(T. D.)—English architecture. 80. Lond. 1904
MURRAY (JOHN) the Publisher—BROWN (G. BALDWIN)
The arts in early England. 2 vols. 80. Lond. 1903
MUTHESIUS (H.)—Das Englische Haus.
sm. fo. Berlin 1904
b

- MYRES (T. H.) *Fellow*—Baptisteries and fonts.
pam. 4o. Preston 1904
- OLUFSEN (O.), Chief of the Expedition—Old and new architecture in Khiva, &c. (The Second Danish Pamir Expedition.)
fo. Copenhagen 1904
- OTZEN (J.) *Hon. Corr. M.*—Das Moderne in der Architektur der Neuzeit.
pam. 4o. Berlin 1904
- OUGH (A. H.) *Associate*—Practical ventilation.
pam. la. 8o. Hong Kong 1903
- Sanitary building construction.
pam. la. 8o. Hong Kong 1903
- PONTREMOLI (E.) & HAUSOULLIER (B.) *Didymes*: fouilles de 1895 et 1896.
la. 4o. Paris 1903
- QUEEN VICTORIA INDIAN MEMORIAL FUND.
Journal, No. 11.
la. 8o. Calcutta 1904
- READE (T. MELLARD) *Fellow*—The evolution of earth structure, with a theory of geomorphic changes.
8o. Lond. 1903
- REED (HARBOTTLE)—Alhallows Church, Goldsmith Street, Exeter.
pam. 8o. Exeter 1902
- ST. BRIDE'S PRESS, LTD., the Publishers—SHALLCROSS (T. M.) The house healthful yet economical.
pam. 8o. Lond. 1904
- SNELL (A. SAXON) *Fellow*—A Hospital ward.
pam. la. 8o. Lond. 1903
- Public baths.
pam. la. 8o. Lond. 1903
- SPIERS (R. PHENE) *Fellow*, F.S.A. MURRAY (J.)—Greece, &c. 2 vols.
8o. Lond. 1884
- Do.
8o. Lond. 1896
- Syria and Palestine.
8o. Lond. 1892
- Kent and Sussex.
8o. Lond. 1896
- Essex, &c.
8o. Lond. 1875
- SPON (E. & F. N., Messrs.) the Publishers—JENNINGS (A. S.)—Paint and mixing colours, 2nd ed. 8o. Lond. 1904
- STRANGE (E. F.)—The rood screen of Ranworth church.
8o. Norwich 1902
- SWARBRICK (J.) *Associate*—Life, work, and influence of Robert Adam and his brothers.
4o. Lond. 1903
- THWAITE (B. H.)—Joseph Aspdin, inventor of Portland cement.
pam. mo. — 1903
- TRANSACTIONS, REPORTS, AND PROCEEDINGS OF SOCIETIES, &c.
- AMSTERDAM—Architectura et Amicitia.—Architectura.
fo. Amst. 1903-1904
- De Architect.
fo. Amst. 1903-1904
- Maatschappij tot Bevordering der Bouwkunst. — Afbeeldingen van oude bestaande Gebouwen.
la. fo. The Hague 1903
- Bouwkundig Weekblad.
fo. Amst. 1903-1904
- Bouwkundig Tijdschrift.
fo. Amst. 1903-1904
- ATHENS—British School Annual.—No. 9.
4o. Lond. 1902-1903
- BARCELONA—Asociacion de Arquitectos de Cataluña.—Anuario.
8o. Barcelona 1904
- BERLIN—Architekten-Verein.—Zeitschrift für Bauwesen.
fo. Berlin 1903-1904
- BOSTON, U.S.A.—Massachusetts Institute of Technology. Technology Quarterly.
la. 8o. Boston 1903-4
- Annual Catalogue.
8o. Boston 1904
- BRUSSELS—Société d'Archéologie de Bruxelles.—Annuaire.
pam. sm. 8o. Brussels 1903
- Société Centrale d'Architecture de Belgique.—L'Émulation.
la. fo. Brussels 1903-1904
- Académie Royale de Belgique.—Bulletin de la Classe des Lettres.
8o. Brussels 1903-4
- Annuaire, 1904.
8o. Brussels 1904
- CHATHAM Royal Engineers' Institute—Professional Papers.
8o. Chatham 1904
- CHRISTIANA—Norsk Ingeniør- & Arkitekt-Forening. Teknisk Ugeblad.
4o. Christiania 1903-1904
- COLCHESTER—Essex Archaeological Society.—Transactions. Vol. ix.
8o. Colchester 1904
- Feet of fines for Essex. Part v.
8o. Colchester 1904
- DUBLIN—Architectural Association of Ireland.—Constitution, &c.
4o. Dublin 1903
- Royal Society—Scientific Transactions.
4o. Dublin 1903
- Economic Proceedings.
8o. Dublin 1904
- Scientific Proceedings.
8o. Dublin 1902-1903
- Royal Society of Antiquaries.—Journal. Vol. xxxiv, parts 1 & 2.
8o. Dublin 1904
- GLASGOW—Architectural Association—Report.
4o. Glasgow 1903
- GUILDFORD—Surrey Archaeological Society Collections.
Vol. xviii.
8o. Lond. 1903
- LEEDS—Yorkshire Archaeological Society—Journal. Parts 67-69.
8o. Leeds 1903-1904
- LEICESTER—Leicester and Leicestershire Society of Architects—Annual Report, 1902-1903.
pam. 8o. Leeds 1903
- LEWES—Sussex Archaeological Society—Collections.
Vol. xvi.
8o. Lewes 1903
- LISBON—Real Associação dos Architectos Civis e Archeologos Portuguezes.—Boletim.
8o. Lisbon 1903
- LONDON—Architectural Association.—A.A. Notes.
4o. Lond. 1903-1904
- Brown Book.
sm. 8o. Lond. 1904
- Sketch Book.
la. fo. Lond. 1903-1904
- British Fire Prevention Committee—Publications. Nos. 76, 79, 82, 83.
8o. Lond. 1903-1904
- Institute of Chartered Accountants—List of Members 1904.
8o. Lond. 1904
- Institution of Civil Engineers—List of Members.
8o. Lond. 1904
- Minutes of Proceedings.
8o. Lond. 1903-1904
- Institution of Mechanical Engineers—Proceedings.
8o. Lond. 1903
- Iron & Steel Institute—Journal. Vols. xlv. 1.
8o. Lond. 1903-1904
- Supplement to Vol. xlv.
8o. Lond. 1904
- List of Members 1904.
8o. Lond. 1904
- Lodge Quatuor Coronati—Transactions.
la. 8o. Margate 1903
- Royal Archaeological Institute—Journal.
8o. Lond. 1903-1904
- Royal Geographical Society—Geographical Journal.
la. 8o. Lond. 1903-1904
- Royal Institution—Proceedings.
8o. Lond. 1903-1904
- Royal Society—Proceedings.
8o. Lond. 1903-1904
- Sanitary Institute.—Journal.
8o. Lond. 1903-1904
- Society of Antiquaries—Archæologia. Vol. lviii, part 2.
la. 4o. Lond. 1903
- Proceedings.
8o. Lond. 1903-1904
- Society of Architects—Year Book.
4o. Lond. 1904
- Architects' Magazine.
Vol. iv.
4o. Lond. 1903-1904
- Society of Arts.—Journal.
8o. Lond. 1903-1904
- Society of Biblical Archaeology.—Proceedings.
8o. Lond. 1903-1904
- Society of Engineers—Transactions.
la. 8o. Lond. 1904
- Society of Medical Officers of Health—Public Health.
4o. Lond. 1903-1904
- Society for the Promotion of Hellenic Studies—Journal.
sm. fo. Lond. 1903-1904
- Surveyors' Institution—Transactions.
8o. Lond. 1903-1904
- LYON—Association Provinciale des Architectes Français—Bulletin.
fo. Lyon 1904

- MADRID—Sociedad Española de Excursiones—Boletín.
fo. Madrid 1904
- MANCHESTER—Literary & Philosophical Society—
Memoirs & proceedings.
8o. Manch. 1903-1904
- MONTREAL—Canadian Society of Civil Engineers—Trans-
actions.
la. 8o. Montreal 1903-1904
- NEWCASTLE-ON-TYNE—North of England Institute of
Mining & Mechanical Engineers—Transac-
tions.
la. 8o. Newcastle-on-Tyne 1903-1904
- PARIS—Société Centrale des Architectes—Annuaire.
pam. 8o. Paris 1904
- L'Architecture.
fo. Paris 1903-1904
- École Spéciale d'Architecture—Séance d'ouver-
ture.
8o. Paris 1903
- ROME—Commissione Archeologica Comunale—Bulet-
tino.
la. 8o. Rome 1904
- ST. PETERSBURG—Société Impériale des Architectes—
L'Architecture. Vol. xxxi. fo. St. Petersburg 1903
- SHEFFIELD—Society of Architects & Surveyors—Annual
Report.
8o. Sheffield 1903
- SYDNEY, N.S.W.—Institute of Architects—Report.
8o. Sydney 1903
- Journal. Vol.
i. Nos. 1, 2, 3. fo. Sydney 1904
- TORONTO—Ontario Association of Architects—Proceed-
ings.
8o. Toronto 1903
- VIENNA—Österreichischer Ingenieur- u. Architekten-
Verein—Zeitschrift. la. 4o. Vienna 1903-1904
- WASHINGTON—American Institute of Architects—
Quarterly Bulletin. 4o. Washington 1904
- TWELVETREES (W. N.)—Electricity for small hospitals.
pam. 8o. Lond. 1903
- WEBB (W. A.) Associate—CHANAGE (D. H. S.)—Battle-
field church.
pam. 8o. —
- TOTAL: VOLUMES (exclusive of Periodicals, Reports, and
Transactions of Societies, and Parts of Works issued
in a serial form now in progress), 46; PAMPHLETS,
27.

PURCHASES.

Books, Pamphlets, &c.

- ALLGEMEINE BAUZEITUNG (in progress).
fo. Vienna 1903-04
- AVENA (ADOLFO)—Monumenti dell' Italia meridionale,
vol. I. sm. fo. Rome 1902
- BENHAM (Canon)—Old St. Paul's. 8o. Lond. 1902
- BRADA (R.)—Porte Piemontesi dal xv al xix secolo.
fo. Turin 1903
- BRITTEN (F. J.)—Old clocks and watches and their
makers. 2nd ed. 8o. Lond. 1904
- BROGI (G.)—Disegni di architettura civile e militare di
artisti Italiani fioriti dal xv al xviii secolo tratti dalla
raccolta della R. Galleria degli Uffizi.
fo. Florence 1904
- BURLINGTON MAGAZINE (in progress).
4o. Lond. 1903-1904
- COCKERELL (S. P.)—Journal of C. B. Cockerell, R.A.
Travels in Southern Europe and the Levant 1810-
1817. 8o. Lond. 1903.
- CONSIDERE (A.)—Experimental researches on Reinforced
Concrete. (Translated by L. S. Moisseiff.)
la. 8o. New York 1903
- CUMMINGS (C. A.)—History of architecture in Italy
from the time of Constantine to the dawn of the
Renaissance. 2 vols. 8o. Boston & New York 1901
- DALY (C.)—Serrurerie; ancienne et moderne.
fo. Paris 1904
- DELAUNAY (H.)—Annuaire international des Sociétés
Savantes. 8o. Paris 1904
- DURM (JOSEF)—Die Baukunst der Renaissance in
Italien. la. 8o. Stuttgart 1903
- FOURNIER (E.) and OTHERS—Paris à travers les âges :
aspects successifs des monuments et quartiers histo-
riques de Paris, depuis le xiii^e siècle jusqu'à nos
jours. 2 vols. fo. Paris 1875 1882
- FOX-DAVIES (A. C.)—The Art of Heraldry; an encyclo-
pædia of armory. fo. Lond. 1904
- FREEMAN (A. C.)—Planning of Poor Law Buildings and
mortuaries. fo. Lond. 1904
- GARDNER (J. STARKIE)—Old Silver-work, chiefly
English, from the XVth to the XVIIIth centuries.
fo. Lond. 1903
- GEYMÜLLER (Dr. H. Baron von)—Die Baukunst der
Renaissance in Frankreich. 2 vols.
la. 8o. Stuttgart 1898-1901
- GONSE (L.)—Les chefs-d'œuvre des Musées de France.
4o. Paris 1904
- GUÉRINET (A.)—Les Cathédrales et les Eglises de
France. fo. Paris 1903
- Le Palais de Versailles: Le Grand et le Petit Trianon.
Cheminées, &c. fo. Paris 1904
- GUSMAN (P.)—La Villa Impériale de Tibur, Villa
Hadriana. fo. Paris 1904
- HAVARD (H.)—Dictionnaire de l'ameublement et de la
décoration. 4 vols. fo. Paris —
- LABARTA (L.)—Hierros artísticos, 2 vols.
8o. Barcelona 1901
- LAVALLEE (J.)—Voyage pittoresque et historique de
l'Istrie et de la Dalmatie, rédigé d'après l'itinéraire de
L. F. Cassas. la. fo. Paris 1802
- LAWRENCE (W.)—The mounting of the Stuart masques.
pam. la. 8o. Lond. 1903
- MACEY (F. W.)—Specifications in detail. 2nd ed.
la. 8o. Lond. 1904
- PERROT (G.)—La Grèce archaïque; la sculpture. (Perrot
et Chipiez, Histoire de l'art dans l'antiquité. Vol. viii.)
la. 8o. Paris 1904
- PETRIE (W. M. F.)—Methods and aims in Archaeology.
8o. Lond. 1904
- RAYET (O.)—Monuments de l'art antique. fo. Paris 1884
- SIMPSON (WM.)—Autobiography: edited by G. Eyre-
Todd. 8o. Lond. 1903
- SPARROW (W. SHAW) and OTHERS—The British
home of to-day. sm. fo. Lond. 1904
- TEDESCO (N. DE) and MAUREL (A.)—Traité théorique
et pratique de la résistance des matériaux appliquée
au Béton et au Ciment armé. 8o. Paris 1904
- TRAUTWINE (J. C.)—Civil Engineer's pocket book.
8o. New York 1900
- VITRUVIUS POLLIO (M.)—A new treatise wherein is
discoursed of the five orders of columns; designed
by Julian Manelerc. Set forth in English by Robert
Pricke. fo. Lond. 1669
- WATERHOUSE (P. L.)—Story of Architecture.
mo. Lond. 1902
- TOTAL: VOLUMES. 41; PAMPHLET, 1.

THE LOAN LIBRARY.

DONATIONS.

- BATSFORD (B. T.)—HARDY (E.)—Graphic staties.
sm. 8o. Lond. 1904
- FAIRBAIRNS (A.)—ANON.—Notes on the cathedrals.
4 vols. mo. Lond. [1904]
- GUNNIS (JOHN W.) Associate—ABNEY (W. DE W.) and
DARWIN (L.)—Notes on the Chemistry of building
materials. 8o. Lond. 1880
- ANON.—The Paris Exhibition 1899. 4o. Lond. 1890
- BOXOMI (J.)—Nineveh and its Palaces. 8o. Lond. 1852
- BOOK OF KELLS—Celtic Ornaments (5 Plates).
4o. Dublin 1892
- BURY (T. T.)—The styles of architecture, 7th ed.
sm. 8o. Lond. 1877

GUNNIS (JOHN W.) *Associate*—(continued).

- CHARNOCK (G. F.)—Graphic statics. Part 1.
ob. fo. Manchester 1899
- GLAZIER (R.)—Historical and descriptive notes on ornament. 8o. Lond. 1887
- HILDEBRAND (H.)—The Industrial Arts of Scandinavia in the Pagan Time. 8o. Lond. 1883
- HULME (F. E.)—Principles of ornamental art. 4to. Lond. —
- JONES (OWEN)—The Alhambra Court in the Crystal Palace. sm. 8o. Lond. 1854
- JONES (W.)—Heating by Hot Water. sm. 8o. Lond. 1890
- JOURNAL—Specification, No. 4. fo. Lond. 1899
- KERR (R.)—A small country house. sm. 8o. Lond. 1874
- LAYARD (A. H.)—Discoveries at Nineveh. 8o. Lond. 1858
- LEEDS (W. H.)—The orders of architecture. 10th ed. sm. 8o. Lond. 1874
- PORTLOCK (Lt.-Col.)—Rudimentary treatise on geology. sm. 8o. Lond. 1849
- SMITH (T. R.) & SLATER (J.)—Architecture: classic and early Christian. 8o. Lond. 1882
- SPECIFICATION—Cavalry barracks. Nos. 1 & 2. fo. Lond. 1891
- Married soldiers' quarters. fo. Lond. —
- Admiralty: Standing general specification for builders' work. fo. Lond. 1895
- STEVENSON (J. J.)—House architecture. 2 vols. la. 8o. Lond. 1880
- TARN (E. W.)—Science of building. 8o. Lond. 1882
- WESTHOFF (W.)—The Forth Bridge. 4o. Lond. 1890
- WORMUM (R. N.)—Analysis of ornament. la. 8o. Lond. 1879
- LOVEGROVE (G. H.)—The life, work and influence of Sir John Vanbrugh. pam. 8o. Lond. 1902
- PERKS (SYDNEY), *Fellow*—Party structures. mo. Lond. 1897
- STANNUS (HUGH), *Fellow*—PETRIE (W. M. F.)—Methods and aims in archaeology. 8o. Lond. 1904
- TOTAL: VOLUMES, 29; PAMPHLET, 1.

PURCHASES.

- ADAMS (M. B.)—Modern cottage architecture. fo. Lond. 1901
- ANDERSON (W. J.) & SPIERS (R. P.)—Architecture of Greece and Rome: a sketch of its historic development. 8o. Lond. 1902
- ATKINSON (T. D.)—English Architecture. sm. 8o. Lond. 1904
- BORGHESE (S.)—In Asia. 8o. Bergamo 1903
- BOUTELL (C.)—English Heraldry. 7th ed. 8o. Lond. 1902
- BROWN (J. D.)—Manual of library economy. 8o. Lond. 1903
- BUMPUS (T. F.)—Cathedrals and churches of North Germany. 8o. Lond. 1903
- CHOISY (A.)—L'Art de bâtir chez les Égyptiens. la. 8o. Paris 1904
- CLAY (F.)—Modern school buildings. 8o. Lond. 1902
- CONSIDÈRE (A.)—Reinforced concrete. 8o. N. York 1904
- CUMMINGS (C. A.)—History of Architecture in Italy from the time of Constantine to the dawn of the Renaissance. 2 vols. 8o. Boston & New York 1901
- DAY (L. F.)—Pattern Design. 8o. Lond. 1903
- ENGELMANN (R.)—Pompeii. 8o. Lond. 1904
- FREEMAN (A. C.)—The Planning of Poor Law Buildings. fo. Lond. 1904
- GALTON (Sir D.)—Hospital construction. 8o. Oxf. 1903
- GARDNER (E. G.)—Siena. sm. 8o. Lond. 1904
- HENDERSON (R.)—Modern homestead: its arrangement and construction. la. 8o. Lond. 1902
- INNES (L. C.)—Law of Easements. 7th ed. 8o. Lond. 1903
- JACKSON (F. H.)—Mural painting. 8o. Lond. 1904; Sicily. sm. 8o. Lond. 1904

- JENSEN (G. J. G.)—House drainage and sanitary fittings. 8o. Lond. 1900
- JOHNSON (J. B.)—The materials of construction. 8o. New York 1904
- JONES (W.)—Heating and ventilation. 8o. Lond. 1904
- LEANING (J.)—Quantity surveying. 8o. Lond. 1904
- LIPPARINI (G.)—Urbino. 8o. Bergamo 1903
- MASSÉ (H. J. L. J.)—Pewter Plate: a historical and descriptive handbook. la. 8o. Lond. 1904
- MITCHELL (C. F. & G. A.)—Brickwork and masonry. 8o. Lond. 1904
- MITCHELL (C. F.)—Building construction. sm. 8o. Lond. 1903
- MORSE (F. C.)—Furniture of the olden time. 8o. New York 1903
- MURPHY (B. S.)—English and Scottish wrought iron-work. la. fo. Lond. 1904
- NEWTON (E.)—A book of Country Houses. fo. Lond. 1903
- NORMAND (C.)—Nouvelle Parallèle des Ordres d'Architecture des Grecs, des Romains. fo. Paris —
- OAKESHOTT (G. J.)—Detail and ornament of the Italian Renaissance. fo. Lond. 1888
- PATTON (W. M.)—Foundations. 8o. N. York 1902
- PETRIE (W. M. F.)—Methods and aims in archaeology. 8o. Lond. 1904
- PURCHASE (W. R.)—Practical masonry. la. 8o. Lond. 1903
- REA (J. T.)—How to estimate. 2nd ed. 8o. Lond. 1904
- RICCI (C.)—La Repubblica di San Marino. 8o. Bergamo 1903

- RILEY (J. W.)—Building construction for beginners. sm. 8o. Lond. 1901
- RUSSELL (J. H.)—Planning and fitting-up of laboratories. 8o. Lond. 1903
- SCOTT MONCHIEFF (G. K.)—Principles of Structural Design. 2 vols. 8o. Chatham 1897-98
- SHEPPARD (E.)—The Old Royal Palace of Whitehall. 8o. Lond. 1902
- SPARROW (W. SHAW)—British Home of to-day. la. 8o. Lond. 1904
- STOCK (C. H.)—Shoring and underpinning. 3rd ed. la. 8o. Lond. 1902
- STURGIS (R.)—How to judge architecture. la. 8o. Lond. 1904
- THATCHER (A. G. H.)—Scaffolding: a treatise on the design and erection of scaffolds, gables, and stagings. 8o. Lond. 1904
- TRIGGS (I.) & TANNER (H.)—Some architectural works of Inigo Jones. 8o. Lond. 1904
- TROTTER (A. F.) and BAKER (H.)—Old Colonial Houses of the Cape of Good Hope. 4o. Lond. 1900
- WOOD (M. P.)—Rustless coatings. 8o. N. York 1904
- TOTAL: VOLUMES, 50.

DRAWINGS PURCHASED.

- DONALDSON (T. L.)—Scrap books: Greek and Roman architecture: Gothic architecture, 2 vols. fo. — 1818-1861
- PEART (W.)—Collection of drawings of old building work. Half-timber houses, &c. fo. — 1869-79

PARLIAMENTARY PAPERS.

- BOARD OF EDUCATION—Report for the year 1901 on museums, colleges, and institutions under the administration of the Board. 8o. Lond. 1902
- General Reports of H.M.'s Inspectors. 8o. Lond. 1902
- Regulations relating to Museums and Institutions. 8o. Lond. 1902
- LOCAL RECORDS COMMITTEE—Report [and Appendix] of the Committee appointed to enquire as to the existing arrangements for the collection and custody of Local Records, and as to further measures which it may be advisable to take for the purpose. fo. Lond. 1902

